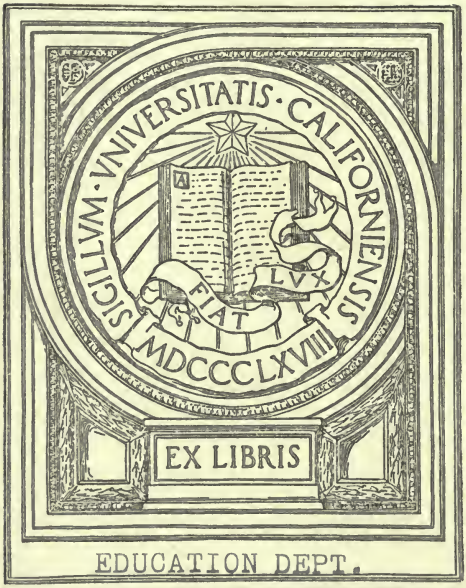
The Kilburn Manual of Elementary Teaching.





EDUCATION DEPT.

Hettie M. Corlett.

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THE KILBURN MANUAL OF ELEMENTARY TEACHING

A PRACTICAL GUIDE TO PRIMARY SCHOOL WORK.

NEW YORK AND CHICAGO.
E L. KELLOGG & CO.
1893.

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EDUCATION DEPT.

TO the great Fraternity of Teachers this humble contribution to our Educational literature is dedicated.

The hints and counsels given have been dictated solely by the desire to aid those earnest labourers in life's field, who are striving—not merely to instruct, but to EDUCATE the men and women of the future.

Throughout the Manual the aim of the writers has been to consider every subject from the child's standpoint, and to keep in view the future of the child, both here and hereafter. Should their words avail to promote higher and wider ideas of education, and to awaken loftier aspirations in those who are called to watch over, to train, and to guide the children of this great nation, they will not have been written in vain.

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THE KILBURN MANUAL

OF

ELEMENTARY TEACHING.

INTRODUCTORY.

MOST people, if asked the question—What is the object of education? would reply—To impart knowledge, or, To prepare children for their future life both here and hereafter. A better definition would be—The object of education is the harmonious development of the child's whole being—body, soul, and spirit. Pestalozzi calls it "The generating of power," and Frœbel "The perfect growth of the whole being."

If this high view of education be the true one—and who can gainsay it?—it proves, beyond a doubt, that the art of teaching is the noblest of all arts, and the one which will best repay untiring labour, thought, and study.

Teachers who realise this, will not find it difficult to rouse themselves to that enthusiastic interest in their work, which is essential to its success. They will entertain just ideas of the grandeur of their vocation, and the momentous issues which hang upon the fulfilment of the duties it imposes. And this appreciation of the importance of the work committed to them, will urge them on to be ever seeking to make themselves more worthy of it. It will quicken them to do their utmost in the great cause. By prayer, by study, by observation, by earnest efforts at self-improvement, each one will be striving to become more and more such a "Work-

man as needeth not to be ashamed." Such teachers will be continually on the look-out for improved methods—for a system which will be at once more practical and more intelligent—for *everything*, in short, which will enable them to reach the highest standard of excellence in their work. They will not rest satisfied with what has been hitherto attempted and accomplished, either by themselves or others; but, believing that the science of teaching has yet great strides to make on the road to perfection, they will hold themselves in readiness to improve wherever improvement is possible.

They will constantly lay to heart the great truth that every child has been created with certain gifts and talents—spiritual, mental, and bodily; yet that these gifts will be unfruitful, or may even be perverted to bad ends, unless they are cultivated and trained. They know that the germs of character lie dormant in the child, and that it is for education to undertake the symmetrical building-up of that character. Every act, thought, plan, and method should lead up to this supreme end.

To such earnest and thoughtful instructors the following pages are addressed, in the hope that they will not only find therein, practical suggestions and instructions which may be of use in their most arduous and honourable calling, but likewise food for reflection, together with encouragement to plan and develop improved methods, new expedients, fresh courses of action for themselves. We should not have presumed to add to the multitude of teaching-manuals which already exist, had we not believed that a great deal may still be done to make the Elementary Schools of England happier places than they are at present, and to render the teaching given within them, at once more effective and more delightful.

May our words, we hope and desire, have at least this twofold result :—

(1.) To awaken a determination no longer to run in the old ruts—smooth, well-worn, and easy though they may seem—if the interests of true education, and the teacher's own high principle and self-respect, point out the duty of making new ones.

(2.) To lead the readers of this little work to devote themselves, with ever increasing earnestness, to that branch of knowledge which should be the study *par excellence* of all who have the privilege of instructing the young—the study of THE CHILD and child-nature.

Oh! how will any thought and observation devoted to this "specific subject" be repaid a hundred-fold to the conscientious and devoted teacher! The child!—with all the glorious possibilities that lie hidden within him, waiting for the delicate and discriminating touch of the true instructor to wake them into life! The child!—with his own personal talents and capabilities; his individual share of good and bad qualities; his powers of mind, and lights and shades of character—what else can better engage the attention of those to whom is committed the work of educating him?

But, to acquire such a knowledge as this implies, of mind and character, of the motives which actuate human beings—especially the motives which actuate the young—and to devise means whereby the child may be so educated as to become a happy, wise, and holy being, is the study of a life-time.

N.B.—This Manual of Teaching is only intended to apply to the time set apart for secular instruction in the Elementary Schools of England. But, to prevent misconception, the editors beg to say that they cannot conceive of any true education as existing apart from sound religious teaching, and are of opinion that a system of morality which had not its foundation in the Christian faith would be unpractical and worthless.

THE KILBURN MANUAL

OF

Elementary Teaching.

CHAPTER I.

School-life should be Happy.

OUR first chapter shall be upon the duty and the possibility of making school a happy place to the young scholars. Some will call in question a teacher's power to do this; others may even dispute its advisability. There is, however, this convincing argument in its favour—that no one who has honestly tried to make education a source of happiness to the young, has ever either regretted or abandoned the attempt.

We do not mean that a child will find all to his mind in a well-managed school. No; he will be called upon to endure much salutary discipline, and will have to summon self-control to conquer many a distasteful task, in the course of "the harmonious development of his whole being!" This will be a part of his education, and a valuable part. Still, we do, nevertheless, assert, that an English child's short school-days ought to be a bright spot in his life, the memory of which will keep green throughout the years that are to follow. We do assert that what he learns at school may be so taught as to enlarge his intelligence, lay the foundations of culture and refinement, and give him a love of knowledge and a zeal for self-improvement, which will raise his whole life above the sordid thing it might other-

wise become. Is this so now? Our readers must answer the question for themselves. And if they reply in the negative, we rejoin—Let them try to discover *why* this is not the result of our present system of education.

We will now proceed to give a few hints for making school happy. Firstly:—

The Means must be adapted to the End.—The *natural* growth of a child, both mentally and physically, is happy, healthy growth; but if the growth is to be natural, the means used to promote it must be *adapted to the purpose.*

Everyone will admit that it is so with physical growth. Food, lodging, exercise—all must answer to the needs of the child. But we do not always realise that this truth applies with equal force to the mind—that the subjects taught, and the way they are taught, should be exactly adapted to the learner's mental requirements. Then, just as that physical exercise which is best suited to the growing body delights the child, so will the proper exercise of his mind, in most cases, afford him still higher pleasure.

There are two ways of imparting knowledge. One consists in cramming the learners with a number of dry facts and statistics which are of little or no interest to them, and which lead to such results as might be expected—a dislike of knowledge, and a tendency to forget the little acquired as quickly as possible. The other plan aims at the training and development of the child *as a whole.* It produces in the intelligent scholar those pleasurable feelings which naturally result from the mind growing in the way its Creator designed that it *should* grow, when He implanted in it those vast possibilities which lie hidden in the human understanding. Even the dull child—when thus suitably instructed—will brighten up and follow his studies with a certain amount of pleasure.

By the Study of Child-nature, we learn how to make Knowledge Attractive.—The more we study

children, the more shall we understand how to render our teaching acceptable to them. There is much latent power in the young, which might easily be turned to good account and guided into right channels, in the course of their education; but which (sad to say!) is often wholly ignored by the careless, superficial instructor.

For instance, that propensity of the child to be always doing something, should suggest to us the desirability of keeping him ceaselessly and happily occupied, from the moment he enters school, till he marches out again—with his work for the day ended.

Again: His love of motion should impress upon us the truth that it is positive pain to children to sit in one position for long together, and should lead us to intersperse sedentary occupation with plenty of brisk physical exercises, and rouse us to trample down that natural indolence, which tempts us to disregard the pleadings of nature in our restless young scholars.

Thirdly: *There exists in most children an instinctive desire to give outward form to the thoughts that arise in their hearts.* The little boy making mud pies in a back yard, or his more fortunate brother fashioning gardens, castles, and forts out of the sand on the seashore, are living proofs of this desire; and the Kindergarten is its legitimate outcome. This childish impulse may be made to yield good fruit all through school life, if plenty of employment is provided for the hands—if the scholar is allowed to draw, model, copy specimens of good hand-writing, express his own thoughts in manuscript, and engage in manual work of various kinds.

Instead of trying to destroy the natural instincts of children (when those instincts are innocent) by setting an iron heel upon them, let us rather utilise them in the work of education. It is true, oh how true! that the contrary mode of action dwarfs the child's intellect, and too often puts an extinguisher on the best and most hopeful parts of his character.

It is our duty to Infuse Joy into the Lives of the Young.—Surely the lives of the children who attend

the Elementary Schools of this country, especially in our great towns, are not so joyous that we need fear to add what brightness we can to them! A true work of love and self-devotion is it, when the teacher seeks, by kindly ingenuity, to make the brief hours which the children of the poor spend under her care, a time of such bright enjoyment that they learn to look upon the school as their second home.

A Happy School means a Busy School.—Let it be well understood, that—by a school where happiness and contentment reign—we mean a school which is full of busy work, where no minute is wasted, but all are exerting their faculties to the utmost, and doing with their might whatsoever their hands find to do. More than half the restlessness and insubordination that perplex teachers, is owing to their own thoughtless disregard of the fact, that children delight to feel they are making progress from day to day, and hour to hour. They will cheerfully undergo a great deal of irksome toil when supported by this exhilarating consciousness.

If it be a true idea of education that it develops power—power to surmount obstacles, to struggle against evil—to toil—to rise—is it not a fearful error to allow scholars to squander any of the precious hours of their school-life, to stupify them with senseless repetition of what they already know, and disgust them with a mechanical routine from which they can derive no pleasure—in short, to keep them "marking time" and beating the air? The wearied looks of the little ones in many schools seem to say—"I might as well be playing in the street for any good I am doing here."

One great aim of education ought certainly to be—to train the child to work—to work on a system, to love work, and to put heart and mind into it.

A Happy School is one where Firm Discipline is Maintained.—It is an error to suppose that children like to be indulged. On the contrary, they much prefer being

governed; provided that the government is kind, firm, and just. Children are never happy when under a weak, flabby authority.

At the same time, it will conduce neither to the happiness nor the efficiency of a school to make discipline consist mainly in keeping children quiet. Such expedients as turning children out of the class,* placing them to stand up on forms or chairs, forcing them to remain motionless and unoccupied for a given time, or to hold hands up in the air or on the head, are the resource of ignorance and inefficiency, and shew total want of common sense. A good teacher knows that you must break in restless young scholars—as you would break in a spirited young horse—by giving them plenty of *exercise*. Only, with human beings, the exercise must be mental *as well as* physical. Would anyone dream of training a fiery, undisciplined colt, by making its legs fast to stakes? Such means, would, it is true, ensure temporary quietude, but the animal would remain even more turbulent than it was before the enforced restraint, as would be convincingly proved the instant it was loosed.

It is not too much to say that the most disorderly children can be subdued and trained, by degrees, into cheerful, attentive learners, if teachers will but persevere in giving them constant spells of brisk movement, alternating with plenty of varied, interesting study. But this study must be so skilfully planned that each earnest effort a scholar makes will be crowned with a measure of success. It must be real work, and not a make-shift expedient for passing away the time—as, when sums or copies are placed on the board hap-hazard, test-cards continually used, reading reduced to a mere mechanical *drive*, (or *drone*) through the reading books—while the teaching of geography and science is limited to committing to memory strings of phrases from text-books; when, worst of all, the whole of school-time is broken up by continual *do-*

*Is it necessary to say that a child should never be turned out of the room? Grave evils may result from this practice.

nothing intervals, caused by the teacher's lack of administrative power and her inability to keep the sharper children at work while the laggards catch them up in arithmetic or other lessons. How can there be order when at least half the children are sitting with idle hands, and, as a natural consequence, either talking, or engaged in mischief?

A Happy School cannot co-exist with Perpetual Fault-finding.—The most fruitful source of worry and unhappiness to children is an irritable temper in their teacher. A high-spirited child will not bear nagging any more than a thorough-bred horse will bear the jerking of the curb. True, the perpetual scolding that obtains in some class-rooms is not always due to the teacher's bad temper; it is sometimes a sad confession of her own impotence. Not having learned how to preserve order with ease to herself and benefit to her pupils, her nerves become so strained that it can hardly occasion surprise if relief is sought in—what the children expressively term—"Always grumbling at us." The effect, however, is most disastrous. The scholars learn to dislike both their school and its teacher, while the constant chiding rouses them to resistance.

We shall have more to say, later on, upon the important points of maintaining discipline and securing attention. Meanwhile, we would address the following words of counsel to any who desire earnestly to have a *happy*, hard-working school, but who find their efforts neutralised through their inability to keep order:—

(a) When your children seem unruly, idle, and troublesome, be quite sure the fault lies in yourself, and humbly set to work to find, and apply a remedy.

(b) Let the scholars instinctively recognise that you mean both to control them and to urge them on to all that they ought to be, and do.

(c) Have ready abundance of nutritious and palatable food, in the shape of good, energetic, interesting teaching,

and dispense this diet with unintermittent diligence and patience.

(d) Give each child something to do the instant he enters the schoolroom, and keep him happy—with constant and varied occupation—until the time for closing arrives.

(e) Let your pupils see that you are not only *well up* in all the subjects taught, but likewise skilful in such technical details as writing on the blackboard, etc.

(f) Let them feel that a vigilant though kindly eye is ever upon them, that no fault goes unnoticed, and that you are perfectly impartial.

Then—in most cases—they will lay down their offensive weapons, and their surrender will be complete and permanent.

Attention must be paid from a higher motive than Inclination.—While all admit that that teacher is eminently successful who contrives to make learning so delightful to a class that the children *cannot help* becoming absorbed in the lessons, and instinctively obeying her commands, it would be a great mistake to imagine that obedience and attention are to rest upon no higher basis than *inclination*. Attention implies effort, and children must obey and attend—not merely because it is pleasant, but because it is *right*. No child is *always* inclined to be studious and docile; but, whether he is inclined or not, the good habits he forms, and the good principles he learns, should impel him to submit.

Good Habits must be formed.—We see, therefore, that a school can hardly be invariably a happy and efficient school, unless right *habits* of attention and obedience are formed. A habit has been described as the "Tendency to do that which has often been done before;" or it may be termed, "A chain forged by repeated efforts in the same direction." The power to acquire good habits is dormant in every child born into the world, and the more unsatisfactory are his home surroundings, the more necessary is it that the school should

train him in such habits, that, at the call of duty, he can summon self-command to *force himself* to accomplish what is required of him.

This, however, is a very wide subject. We have only touched upon it here to shew that we are not so sanguine as to expect education to be carried on wholly by means of "moral 'suasion!" There can, on the contrary, be no real worth or happiness in anything that does not rest on the grand foundation of religion, morality, and self-restraint.

Still, this does not in any degree detract from the truth of what we have advanced in this chapter, viz., that school-life can become delightful both to teachers and children; that lessons may, by means of skilful teaching, become a pleasure; that good order is chiefly promoted by constant occupation, including abundance of drill; and that habits of obedience and attention will thus be almost insensibly formed. If—in addition—the teacher is one who has a genuine love for her work; if she is uniformly hopeful, kind, firm, and diligent; if—like a good parent—she sympathises with every effort made to improve, and is solicitous that every child shall grow towards perfection, then that school bids fair to be an ideal school, and such as will exercise an incalculable influence for good over all that are brought into touch with it.

N.B.—Throughout this Manual, the teacher is (for convenience sake) spoken of in the feminine gender and the child in the masculine. It is almost needless to say that the observations and suggestions made apply equally to boys and girls, and to teachers of either sex.

CHAPTER II.

Good Order.

GOOD Order is Essential.—Without good order, any real instruction is impossible; yet it is the common complaint of young teachers that their scholars are undisciplined and unruly. They forget that the maintenance of order forms an important part of the art of government—the most difficult of all arts—and that the principles and rules of wise and good government must be mastered, ere success can be hoped for. Let us briefly examine some of these rules and principles:—

(1.) The first thing essential to good order is a firm determination to have it. Let the teacher bear in mind that all authority comes from on High, and that she is placed in her present position to lead, to rule, to train those under her both to learn and to obey. She must, therefore, banish all weakness and timidity, and present herself before her scholars with that quiet, assured manner which — they will be quick to see—cannot be trifled with. Let her assume a proper ascendency over them *from the beginning*, and she will have a happy class of respectful, obedient pupils. She must always *look* steadily at them when she speaks, and avoid a hurried, nervous manner. She must speak in a well-pitched tone, and with great distinctness; but should not raise her voice, even when an order is disobeyed.

Importance of Maintaining Discipline by the Eye.—The teacher should so stand or sit that her eye is continually upon the whole class. She needs to train herself to supervise every individual under her care at the same time. She cannot, of course, distinguish the features of each pupil.

but she can, by practice, greatly *widen* her range of vision. Anyone may do this, in a certain degree. It is really necessary to good discipline that a watchful eye should be ever on the class, but this should be managed without apparent effort. Even when using the blackboard, the teacher must contrive not to *turn her back* to the children.

Tendency to Disorder must be Checked Instantly.—Apparently trifling acts of disobedience, or slight inattention, must be noticed at once. Unless the first whisperer is silenced, there will soon be a dozen children talking. The first slight fault, whatever it may be, must be visited upon the offender with decision and promptitude. The question arises—how is this to be done ?

If possible, *not* by interrupting the teaching and throwing the whole class back two or three minutes with their work ; but in the quietest manner possible. If it is a solitary case of inattention, a brief pause, or a significant glance, or a question addressed to the offender, will often remedy the matter, without anyone else being the wiser. The same treatment will often stop *talking ;* but, if it fails, the teacher may bring confusion on the culprit by silently writing his name on the blackboard, or by saying quietly—" If the child who is whispering has anything really wise and clever to say, will he come and stand by me and let the whole class hear it ? "

The Control exercised should be Quiet and Good-Humoured.—Control must be *quietly* exercised. The teacher who is desirous to maintain good discipline, must be calm and self-possessed herself. Good teachers never either scold, or teach noisily. They are too well aware that *education* cannot be carried on amid interruptions, and that the worst of all interruptions are those caused by the teacher's own want of temper and self-possession. Besides, scolding and angry fault-finding are lowering to the high, sacred office of a teacher.

Teachers should also watch against a habit of saying "Hush-h-h!" continually. It is a trick which is easily acquired, and the effect is not pleasant.

In short, the less demonstrative and self-asserting a teacher's rule is, the more effective will it be. It is a great mistake to adopt an over-bearing, dictatorial manner, "with frowning brow and lip compressed." The assumption of power often makes a teacher seem ridiculous. True authority is unostentatious and keeps in the background; it is something that is felt, not seen. It then most resembles the highest of all authority—the supreme rule of Almighty God. Though omnipotent, He is invisible, and works His sovereign will in silence and tranquility.

Discipline should be Steady and Uniform.—There must be no variableness or uncertainty about the control exercised. The children should not feel that there are times and seasons when they may take liberties, or they will calculate chances and end by setting the teacher at defiance. Neither should any teacher rest satisfied with exacting obedience from the children merely when she is present. Children are capable of exerting self-control, and this capacity should be developed. If a child is taught to do right because it *is* right, and not only because the teacher's eyes are upon him, he will have mastered a lesson which will be of more value than all the learning in the world. The members of a school, no less than the members of an army, are far happier when they are well-disciplined. Even outside the schoolroom, the teacher's righteous authority should make itself felt—in the street or the playground.

Order must be Maintained Perseveringly.—Discipline ought to be continuous. It must last on; it must wear well. The fearless teacher, who calmly and persistently makes it felt that she knows she has *the right* to be obeyed, becomes invested with a sort of dignity and ends by com-

manding respect. But she must beware of relaxing her efforts. They will avail little, unless she perseveres to the end in ruling those under her with diligence.

One great step towards having an orderly school is gained, when the teacher, by wise and consistent management, succeeds in convincing the children, that it is a much *pleasanter* thing to be good than naughty. Some teachers have a wonderful knack of making it actually easier for a child to do right than wrong.

The Perfection of Discipline.—Perfect order is procured when the child is induced to take himself in hand, and restrain his inclination to talk, or to be idle and insubordinate. Control may be exercised either from within or from without. The parent's or teacher's will must be the will of the child at first, for the latter can find true happiness only when under the dominion of a steady, reasonable will outside of himself.

But there is a point beyond which the will of the parent or teacher should not be carried. They have to supplement the child's will, not to supplant it: to train, not to cripple it. As the knowledge of right is developed by sound religious teaching, he ought surely to learn to do right from principle, not only from constraint. Whenever the child—while conscious of his own imperious desire to do what is most pleasant to himself—yet refrains, for conscience' sake, from what is forbidden, he has taken a step in the upward path that leads to the Eternal City.

But, alas! we have only to look around us, to see how deplorably deficient is the present generation in this quality of self-restraint. How valuable, then, how necessary is its inculcation! Here, surely, an ounce of prevention is worth many pounds of attempted cure. The opportunities which school-life affords of training the will are innumerable, and not until the teacher sees an earnest attempt on the part of her pupils to *control themselves*, should she consider that her method of securing good order is satisfactory. The external

order with which some rest content, is but the outward *sign* of good government. Teachers must aim at being something more than policemen.

The Teacher should try to have the School always on her Side.—How this is to be effected, must be left to personal tact to discover. But, in some way or other, it is essential for the scholars to realise, that the teacher relies on their co-operation in the performance of her duties. What a wholesome effect it has on children, when they feel that the honour and good name of their school depend on themselves! A visitor once asked the head of a school how his "excellent results" had been obtained; the reply was, that this was due to the unselfish devotion of the elder boys to the interests of the school. Let a teacher ever remember that the material of a good school is to be found in the scholars, and that without their support she cannot succeed. Dr. Arnold had a marvellous gift for thus creating an *esprit de corps*. He used to call the elder boys his "coadjutors."

The child, in leaving home for school, enters a large community—a community that has its laws and its rights, and also the power to confer great benefits. When he finds that he is given a voice in the arrangement of some school detail, he probably realises, for the first time, the fact that his opinion is of any consequence, and awakens to a sense of his responsibility.

The creation of a loyal spirit is a department of "good order" which will amply repay careful and prolonged effort on the part of the teacher.

The Teacher must not close her ears altogether to adverse reports concerning the Scholars.—While all teachers should rigidly put down tale-bearing, it would not be right to refuse to listen to those who may have just cause of complaint against the children, or who may inform them of misdemeanours they might otherwise remain ignorant of.

Many grievous things may happen which a teacher cannot possibly know unless the more trustworthy scholars inform her respecting them. Teachers who labour to create a healthy public feeling in their school, will endeavour to induce the elder pupils to suppress by their own personal exertions all that is wrong and vicious before calling in the aid of those in authority.

They should not fail to teach how wrong it is to take part with evil-doers, and what high principle and moral courage it needs, both to put down mal-practices ourselves, and to appeal, when necessary, to those who have power to apply a remedy. It should be explained that while tale-bearing is to be utterly condemned—as springing from mean and malicious motives—it is a plain duty to report such faults as might bring the school into disrepute, or have other grave consequences—such wrong-doing, for instance, as the destruction of property, or the teasing and bullying of the younger children. Complaints brought by the elder scholars should be received in private, and not acted upon unless the teacher sees sufficient cause for doing so.

Wholesale Condemnation of the Children is Unwise.—It is an unmistakable sign of incapacity when a teacher is ready to lay the blame of her ill success upon her charges. Managers, inspectors—nay, the children themselves—feel contempt for teachers who burst out into complaints about the unruliness and stupidity of their pupils. They know very well that a class is almost invariably quiet and studious when properly managed. Instead of grumbling about her tools and material (like a bad workman), let the incapable teacher labour to improve herself and her methods, and she will soon teach with delight to herself and benefit to her pupils.

Matters of Small Importance can be Amended by a Hint.—Suggestions about trifling matters are often better than commands. General hints and instructions about

manner, dress, neatness, are usually better than denunciation of a particular offender. Children are often very sensitive, and it may not be a child's fault that his manner is rough and his clothes are ragged.

Reporting Children to their Parents.—This should be very sparingly resorted to, and any communications of the sort should have reference to such matters only as are under their control, *e.g.*, irregularity of attendance, neglect of home-lessons, or untidy personal appearance. There may be exceptional cases of children persistently rebellious, impertinent, and vicious, when it becomes a duty to warn the parents, that, unless there is amendment, expulsion must be the penalty. To expel scholars in what *appears* a sudden manner, without notifying fathers and mothers of the previous wrong-doing of their children, is not fair or just towards them. Much tact is needed in regard to remarks made to parents on their children's conduct, and, as a rule, unless something agreeable can be said, "golden silence" had best be observed.

Teachers should not forget that a certain respect is due from themselves to the parents of their pupils, as being the God-appointed guardians of the latter and bound to support their rights. They should studiously guard against making any disparaging remarks respecting the father or mother of any child, either before the child himself, or the other scholars.

Messages should not be sent by the children. Either a responsible person should call, or a note be written.

Notes to parents should be *well written*, on good paper, enclosed in an envelope, and should begin "Dear Sir," or "Dear Madam," etc., and never "Mrs. Smith," etc. They should be couched in polite, *moderate* terms. It often shows good sense to ask as a favour what we might demand as a right.

Interviews with Parents sometimes Painful.—Teachers have sometimes much to bear from the injustice or even rudeness of parents. The latter hear some garbled

account of what has taken place at the school, and rush off to vent their indignation upon the teacher. Then will be the time for the latter to show that calmness and self-control which are of such priceless value in all relations of life, and to return the "Soft answer that turneth away wrath."

First, let the teacher refuse to speak to the parent before the class. The hall or corridor must be used if there is no private room available. Next, let her remember that the parents' natural affection for their child makes them sensitive about ill-treatment, and that they have doubtless heard an exaggerated version of what has happened—such an account as would justify them in being angry, were it true. Let the teacher quietly reply, "Yes, but you have only heard one side; let me put the other before you." If she does this gently and good-humouredly, explaining that she has acted for the child's good, and expressing her desire for its true weal, she may not only pour oil upon the troubled water, but secure a good friend for the school and a coadjutor in the child's education.

When parents are too excited to listen to reason, it is better to ask them to call again after school is over.

The Teacher must be herself an Example of Order.—Pupils will be more influenced by a teacher's example than by her words. Let her be at her post—day after day—ten minutes before the time for opening, if possible, ready with a cheerful greeting for her pupils, and arranging beforehand those external details which so greatly affect the work; let her be always punctual, alert, and diligent, and the results of her conscientiousness will soon be reflected in the order and discipline of the school.

CHAPTER III.

Securing Attention.

THE question of *good order* leads naturally to that of *attention*, for the immediate object of discipline or order is to enable the child to pay undivided attention—to concentrate his thoughts upon the subject in hand. At the same time, we must not make the mistake of supposing that absence of noise will, of itself, induce attention. It is quite possible to have perfect quietness along with inattentive pupils. Children may be very orderly, and yet in a condition of complete mental inactivity. It is the *fruitful* quietness of life and progress that is wanted in our schools, and not the sterile quietness of decay and death. The test of good order is not noiselessness, but the power to obtain quiet at a moment's notice.

Definition of Attention.—Attention means the fixing of the mind upon one object or subject to the exclusion of others, and is a mental power of the utmost importance both to old and young. It is, to a great extent, a habit which, like most other habits, can be easily acquired in early life. Although not a faculty by itself, like memory or reason, it is nevertheless necessary for the effective use of all the other faculties. Of itself, it gives us nothing, and yet it helps us to accomplish everything. Perfect attention implies a continuous and voluntary fixing of the mind on whatever is presented to its consideration, in spite of any natural inclination to be volatile. It also supposes the ability to change from one subject to another without loss of thinking-power. Its cultivation in childhood is important, as it secures for after years the capacity for persevering thought and steady application.

and consequently, ensures success in any of life's varied callings.

Early Training is Essential.—Attention is, to some extent, a part of child-nature; for we see that children can fix their minds intently upon what interests them or attracts their notice. But we cannot compel attention, though we may punish for inattention. Therefore a teacher's wisest plan is to make attention, as far as possible, a fixed habit. We must, however, be patient. Concentration of mind is not gained in a day. Time is wanted for its growth and cultivation, and we must be willing to *wait* for the visible results of our careful training, and to build up gradually a habit of attending to the matter in hand.

Preliminaries. — Before going on to consider sundry methods of cultivating the power of concentration of mind, we shall do well to glance at certain external means of obtaining attention from the children attending our schools. To begin with, they must be made to understand that *attention is expected of them;* that every teacher has a right to require, that when she speaks her words shall be listened to, and an effort made to understand their meaning. Strange to say, many teachers fail to impress this lesson on their pupils, and allow them to listen or not, just as the fancy takes them, often even repeating words for their benefit when they are so wanting in respect as to be looking about them while she speaks. Let it then be made an invariable rule, that:—

The Children look at those who Address them.—Upon taking charge of a new class, almost the first thing a teacher should notice, is whether every child in the class looks at her when she speaks to them collectively. If not, it will not be uncharitable to suppose that they have been imperfectly trained, and she must set to work to remedy the evil without delay. At the recognised signal or the word "attention!" every child must look at her instantly; and

throughout all oral lessons she must ascertain that no eye wanders. It will be well to impress on the children that it is considered bad manners not to look at a person who addresses them.

This is the first *indispensable* condition of securing attention.

Interruptions must be Guarded Against.—In the second place, every precaution should be taken to ensure freedom from interruption. The organisation should be so perfect, that no necessity need arise for "fetching and carrying" during school-hours. Messages from one teacher to another, or from one class-room to another, should be interdicted. The head-teacher should see that each class-room is well supplied with *necessaries*, so that the need to borrow will not occur? She should make a rule—and insist upon its being kept—that loans of maps, pictures, objects, etc., must be applied for before school commences, or at some other permitted time; also that everything needed for the morning's (or afternoon's) work should be placed ready. That school would, indeed, be ill-managed, in which teachers were allowed to apply for *stores* during school-hours!

Further than this, a good teacher avoids all interruptions that come from noisy teaching, such as talking in too high a key; repeatedly ringing a bell, striking a desk, or calling out "silence," especially in the middle of a lesson; censuring pupils publicly; and other disturbing habits of a like nature.

If a child is obliged to go out of the room for any purpose, he should, as a rule, be sent during the physical exercises which ought to come between each lesson. (N.B.—It is of real importance, on several grounds, that the teacher should notice whether a child is absent from the class-room more than the precise time needed for the purpose; and, if so, that she should immediately send in search of him.)

Children must be taught to Work on through Interruptions.—While the teacher does her best to prevent

interruptions, she should yet train her pupils to exercise self-restraint by continuing to work steadily, no matter what may occur—who enters the room or leaves it, etc. Frequent rising from the seat, as a mark of respect, is much to be deprecated. As a rule, children should only stand up when an Inspector, a Clergyman, or a Manager enters the room; and they should never do this until the signal for it is given. The head-mistress—as she passes round the class-rooms—will do well to forbid any standing up on her account; and, if managers pay frequent visits, they will probably prefer that the same custom should hold good in regard to themselves. They will find the amount of earnestness and attention with which the scholars continue to work, spite of their entrance, is a good test of the skilful organisation of the school.

Teachers should not stand too near the Class.—A teacher's rostrum or desk should be placed so that her glance can take in every child in the room. She should teach from the rostrum, or stand at least three feet from the first row of desks. It is almost needless to say, that when a class is brought out for reading or any other purpose, the children should never be permitted to crowd round her, but be arranged with military precision in a line, or round three parts of a square. Under these circumstances she should make it a rule that no two children stand so close together as to touch one another.

Lessons ought never to be Prolonged.—The prolonging of lessons to suit the convenience of the teacher, or because she unwisely thinks it better to continue so long as a fair proportion of the class appear interested, is a breach of trust towards the education authorities, and an injustice to the children. The time-table is understood to be conscientiously adhered to, and no right-minded teacher will infringe it without grave necessity. But, supposing the children begin to shew signs of weariness in the course of the legitimate lesson

of twenty, thirty, or forty-five minutes—to yawn and fidget—let the teacher at once give them some change of posture.

How to cultivate the Power of Concentration.—One of the greatest boons a teacher can bestow on her pupils is to develop their power of devoting close and persistent attention to one thing. Now, there is no surer way of training this faculty in young people than by first calling into play the ability to *observe*, according to the methods recommended by Frœbel. The following well-recognised plans will be found of great use in exercising and testing attention in its early stages:—

(a) Hold up two objects of diversified character, let them be inspected by the pupils for a few minutes, and then put aside, and described by them. The same plan may be pursued with three or more things, according to the age and abilities of the children.

(b) Hold up a picture containing much detail and many figures, and then proceed as in *(a)*.

(c) Tell children to name the shops, houses, etc., in a certain street.

(d) Several different substances may be put before the children or into their hands, and, when removed, described as to properties, size, shape, and so on.

(e) Pupils may be taught to judge of lengths and distances by comparing them with some known length, say, one foot or one yard.

(f) A more advanced exercise is that of *comparing* objects that are somewhat alike. After both have been exhibited, they should be laid aside, and the pupils then required to mention the points of similarity and contrast.

In all such exercises, the teacher must guard against confusion, and keep in view the age, defects, and abilities of the scholars. One great advantage of the above method of training is that it enables the teacher to lead the children from the known to the unknown, *e.g.*, by their being led to describe a

cat, a fair idea of a tiger may be imparted; a known stream or pond can be utilized to give a notion of a large river or lake. Whenever children are allowed to give the result of their observations in their own words, correctness of language as well as connection of thought must be insisted on.

These simple methods of training children to use their faculties must be persevered with, the teacher bearing in mind that no sooner does observation become easy to a child, than attention becomes easy. We will now say a few words on what the teacher may require and expect from the elder children in the way of attention :—

Continuous and Concentrated Attention—General Counsels.—As a rule it may be said that before attention can be relied on, the interest of the pupils must be aroused by legitimate means—such as, curiosity about the subject of the lesson, love of learning, the pleasure of being employed, or desire for the approval of the teacher. She must endeavour to awaken a longing for information, to excite wonder, and kindle delight, according to the nature of the lesson given. The children ought to feel pleasure in exercising their minds, their hands, eyes, and so on, and will do so, if influenced by her earnestness, thoroughness, and ability.

At the same time, the teacher must remember that all children are not equally attracted by the same subject, and that she will have occasionally to point out the great value of certain lessons and special branches of study.

Another matter to bear in mind is, that the fruits of attention are not always immediately evident. Some children require a little quiet reflection on a lesson before the result is apparent. When they are learning to observe, let a teacher beware of too much talk, as it sometimes distracts the attention of children instead of fixing it.

Teachers must not be discouraged by apparent failure to secure Attention.—A young teacher is often

daunted to find that her class begins to shew signs of weariness before the lesson is half over—carefully given though that lesson may be. She must, however, remember that what is clear and interesting to herself is not always so to her pupils. It will be well, by questioning them, to ascertain whether they are following her, or she may shew them some picture or other illustration, or tell them a short anecdote, to kindle their interest. Often she will discover that her scholars have missed the whole gist of the subject, which must then be recapitulated in plainer, simpler language.

Some other Obstacles to Attention.—In the children themselves are to be found, at times, certain difficulties which prevent their paying attention. Weakness of body and mind—often caused, in very poor schools, by semi-starvation—sluggishness of temperament, or, on the other hand, over quickness and vivacity; presumption and conceit are hindrances which a teacher must be prepared to encounter and overcome to the best of her ability.

Distracting sights and sounds, in so far as they are under the control of the teacher, should be almost *nil*. She will either take care to reduce them to a minimum, or will so engage the attention of the pupils that they will not notice them. Then—even as fatigue of body is remedied by drill or change of position—so fatigue of mind may be relieved by change of subject, or by a minute's total cessation from study. The attention even of the best-disposed children may also be weakened by physical discomfort, arising from a cramped position, cold, heat, or ill-ventilated rooms.

The Advantages of well-trained powers of observation and attention are very obvious. The habit of unswerving attention, when once acquired as a part of one's mental equipment, braces the mind for its work in after life. In all callings quickness of apprehension, which is one of the results of the ability to concentrate the attention, will enable a workman at

once to receive and understand orders, and execute them as required without the risk of mistake. Scientific men, artists, inventors, etc., owe their renown, in the main, to their capacities for observation of and attention to details. The attentive mind can also find wide fields of innocent enjoyment and recreation, which are wholly or partially closed to the inattentive. In visiting museums and other exhibitions, or buildings of interest, and in travels by sea and land, it is the attentive mind that receives the most benefit.

Thus we see that the earnest teacher must not only consider what lessons to give and the best means of imparting them, but must also study how to make the most of her pupils' attentive and retentive faculties.

Other methods of quickening Concentration of Mind.—Besides the methods already suggested for cultivating the habit of observation in the young, there are several others which may be used, from time to time, to accustom young people to work quickly, and concentrate their attention on one thing at a time. Such means must be used with caution; there is a danger of straining the minds of earnest workers if they are made to exercise this faculty of close concentration too often, or stimulated to undue mental activity :

(*a*) An inattentive child may be asked to take a single object and write down all he can discover about it in a given time—say fifteen minutes—viz.: its colour, shape, size, uses, etc.

(*b*) The teacher may dictate a sentence slowly, and require the scholars to tell her how many letters it contains.

(*c*) Or, she may read a passage from a book, and ask them to keep count of the number of words.

(*d*) Again, a long sentence may be read once, and the class told to write as much as they remember of it.

(*e*) Another way of quickening interest is to arrange school matches in various subjects—geography, mental and written arithmetic, spelling. Anything of the kind—spelling-bees, theme-writing—should be seized upon with eagerness by the

teacher, as a means of stimulating honest effort, and relieving the monotony of school-life. There are afternoons in mid-winter, when all without is bleakness, dullness, and fog. Then is the time for the teacher to throw off her own lassitude, and introduce some cheerful variety in the ordinary work which will chase away dreariness, and make the school appear, to its inmates, the one bright spot in creation. No inspector would object to the lesson marked on the time-table being set aside (for so good a reason as this) in favour of an hour's musical drill or class-singing; provided it were only done occasionally.

Time Tests in Arithmetic.—These are exceedingly helpful, and should frequently be used for a few minutes at once. Twice a day will not be too often, where the pupils have contracted habits of listless indifference. They should be confined to the simple rules and such work as is easy to the pupils. A sheet of sums may be exhibited, and the child who works the greater number correctly, in ten or fifteen minutes, rewarded by having his name written up, or in some other way. "Continuous addition or multiplication" can also be utilised for this purpose.

Allow Children only just enough Time for their Work.—The pernicious habit of dawdling through sums, copies, composition, and memory work, has to answer for much chronic inattention. The whole class should not be kept waiting for lazy, inattentive children.

The Teacher's own Estimate of the Importance of Education the best Stimulus.—After all has been said and done, it will be found that unless the teacher infuses into her scholars a conviction of the deep importance of their studies, and the necessity of making the most of the short time allowed for them, her efforts will not bear much fruit.

There is, about some schools, an atmosphere of briskness, business-like energy, and cheerful progress, that cannot fail to

strike even a mere stranger. Where such happy conditions exist, it will be found that the teacher has managed to imbue the pupils with her own spirit of indomitable energy; indeed, it sometimes happens, that—so great is the fire of zeal kindled—they have even to be restrained lest they injure themselves by over-much application. In such cases, one great object of education has been attained, by the arousing of a desire for knowledge; and consequently the scholars, on quitting school, will probably become self-educators and use the information already gained as a stepping-stone to something higher and better. The same excellent results may confidently be expected whenever the mind, by *true teaching*, is kept in the full tide of healthy action.

If we contrast with such fortunate scholars the jaded, indifferent aspect of the children whose teacher takes things easy (*i.e.*, loiters along, dragging her unwilling pupils after her) during nine months of the year, trusting to prepare, by hard cram, during the last three months, for the dreaded Examination, we shall understand a little why some teachers have bright, orderly schools, and intelligent, attentive pupils, while others bring both themselves, their school, and education itself into contempt.

CHAPTER IV.

Rewards and Punishments.

IT is a question of grave moment how far it is desirable to put before children other reasons for well-doing, than the general, broad principle of doing right for right's sake.

There are to be found stern moralists who contend that, in school management, no rewards whatever are admissible, on the ground that they tend to make children act from secondary motives. But surely to argue thus is to shew ignorance both of human nature and the principles of true government.

It must be remembered that, in children's minds, the abstract notion of what is right is in a very elementary state. It requires some time to arouse the higher faculties of their nature. Therefore, rewards and punishments are even more needful in the management of a school than in that of an army or a State. They serve to promote discipline, and act as a stimulus to virtue and exertion.

Has not the system the highest of all sanctions?

Knowing the weakness of our mortal nature, the great Creator stimulates and encourages us with the hope of reward, and deters us from evil by the fear of punishment; and surely these aids to virtue are more needed by children than by those who are of mature age and experience.

Plainly, we cannot afford to dispense with such powerful incentives to industry and meritorious conduct, in that little world which we call *The School.*

Emulation.—Even emulation is not to be discountenanced, so long as it is fostered in a right spirit, and brought to bear on the scholars with discrimination and prudence. It is

quite certain that the principle of emulation is a natural one, both with young and old; and yet we find that the advisability of its employment in the working of a school, is a question much disputed. This no doubt arises, partly, from the different sense in which the word may be understood.

The emulation which a teacher may safely encourage is that which produces a genuine desire for progress, for honourable distinction and mention, and for the good repute of the school; —such emulation, in short, as leads the child "to forget those things which are behind, and reach forth to those things that are before." The kind of emulation to be discouraged is that which creates a fondness for self-glorification, and an envious desire to rise by the downfall of others.

S. Paul speaks of the former, when he says: "If by any means I may provoke to *emulation* them which are of my flesh, and might save some of them." To the latter he alludes when he tells us to avoid, among other vices, "Hatred, variance, *emulation*, wrath, strife."

The teacher will find that some pupils like being above their school-mates merely from a love of pre-eminence, and that too when they attain their position, not through their own exertions or deserts, but because others from some cause, have fallen to the rear. They feel as much pleasure in another's failure as they do in their own success. It is such selfish rivalry as this that teachers must set their face against, otherwise it may lead, in after years, to unscrupulous ambition. On the other hand, a child that is imbued with the true spirit of emulation, will rejoice in the success of others—even though it may result in his own discomfiture—and will evince neither petty jealousy nor a spirit of disparagement.

It may be further remarked, that emulation is the foundation on which all games of skill and athletic sports rest. And is it not universally considered that such competition is not only a powerful stimulus to exertion, but that it teaches young people to give and take, to bear defeat good humouredly, and to feel generous pleasure in the success of another?

There ought to be such an *esprit-de-corps* in a good school, as would lead the unsuccessful aspirant to rejoice in the honour awarded to the talent and diligence of a companion, and to feel that he himself gains a sort of reflected credit therefrom.

It is of great importance to notice that it now and then happens that the children in a class are very unequally matched as to ability and outward advantages. The result of this is that all the emulation is left to a few of the more clever pupils—the others shewing signs of indifference to their work. It is then that the able teacher must find some means that will have the effect of restoring the *general* interest of the class in their studies.

Prudent use of Rewards and Punishments.—The necessity of rewards and punishments in the management of a school being admitted, it will be wise here to consider a few safeguards for their due administration.

They ought not to be assigned only for intellectual progress or talent. The moral improvement of children is even of more importance than their progress in learning, and should meet with equal if not greater encouragement, while deviations from the standard of right should be visited with heavier penalties. The child who is reverent, truthful, attentive and high-principled, should stand higher in the teacher's estimation than one who merely answers questions well, or takes a good position at an examination. Any particular virtue in which a school is strikingly deficient, may often be encouraged by offering well-considered incentives to that virtue.

Some children being more sensitive than others, it follows that punishments must be graduated as to severity, when possible. A pupil who has a hard, coarse nature, will care very little for a penalty that would almost crush the spirit of one with a delicate organization. The general rule, then, will be—Punish only as much as is necessary to correct a fault, so far as this can be done without any appearance of injustice.

Rewards and punishments should be used only when appeals to higher motives fail, and then not too lavishly, or they will lose their force. They must never be given without the proper accompaniment of dignity and seriousness. The more impressive the manner in which they are administered, the more beneficial will they be.

The Teacher must shew that she attaches Importance to her System of Rewards, etc.—Before entering upon the subject of rewards and punishments in detail, it will be well to make a few observations upon a side of the question which deeply affects it. Teachers are apt to forget that the success of any system employed, depends almost entirely upon the amount of importance with which they themselves invest it. Before adopting any plan for exciting emulation, let them seriously count the cost—the time, the trouble, the exactitude, the perseverance that will be needed to carry it through. No matter how excellent a scheme may be, it is worse than useless to commence unless there is the firm determination to continue.

Frequent Changes Unadvisable.—Furthermore, we would say to teachers—"Beware of frequent changes here. Having once deliberately settled upon your plan of action, keep to it—at least, until you see some very urgent reason for introducing alterations." We must not forget that the *traditions* of a school count for a great deal. A system which has stood the test of time is more likely to be respected than one which is more or less of an experiment.

In nothing do desultory teachers shew their true colours more plainly, than in methods for arousing interest in matters of this kind.

There are schoolmasters and schoolmistresses who would set a fresh scheme afloat every few weeks, and bring each successively into contempt by their lazy, half-hearted way of carrying it into effect. Let them rest assured that the

children will attach the same degree of importance to any method of rewards or privileges that they do themselves. If they value and respect their system, the pupils will do so likewise. If they come to regard it with indifference, the same spirit will soon be diffused throughout the school.

Rewards.—The great point to remember here is that the intrinsic value of a reward should count for next to nothing. Indeed, the less costly the prize, the more of honour may attach to its attainment, if the teacher so determine.

Among such rewards we may mention—*Taking places in class according to the order of merit.* This mode of stimulating zeal and industry on the part of the pupils does not receive the attention it deserves, in elementary education. Its general adoption might be made a powerful lever for raising the tone of many schools. But whether this be considered feasible or not, it could at least be used with excellent effect at weekly or fortnightly examinations. And the names, at regular intervals, might be posted up in their order, for all comers to see.

Teachers might also allow the marks obtained by a child at periodical examinations to determine his *standing* place in the class. When the scholars take places for each lesson not given while they are in the desks, it is considered a good plan to allow children to occupy, at the beginning of a lesson, the same position which they had attained at the close of the preceding one. A place should be lost for late attendance or for absence.

This is, doubtless, an excellent means of keeping the scholars on the alert, and proving to themselves how they stand. When taking places in class, a child should not usually go up, or down, more than one place at a time.

Marks or Checks.—A system of marks or checks (or, for quite young children, reward cards) tends greatly to diminish the need of punishment, and in other ways may be productive of most beneficial results. If this plan is used earnestly and perseveringly, it is sometimes enough in itself

to maintain perfect order and attention, and secure the rapid advance of the pupils. It would be well if each teacher were allowed a very few *honour checks*, which she could give to such children as distinguished themselves in the examinations. These honour checks might qualify those who receive them, to compete for certain prizes at the end of the school year.

Competitions.—*Time-tests* are dealt with in another part of this book. But, to the able teacher, other competitions will suggest themselves, which—if judiciously introduced—will be found of value.

Certificates and Testimonials of Merit.—These can be so managed as to incorporate the advantages of all other plans for rewarding good conduct. They afford every scholar, even those of mediocre ability, an opportunity of having his efforts at self-improvement properly estimated; whereas prizes can only be gained by the few. The various degrees of merit attained by the pupils can be accurately recorded on certificates by the discerning teacher.

These may also be so worked as to cause a child to reflect on the preparation needed for his future career in life; since a well-earned and discriminating testimonial, on leaving school, would doubtless be of great service to children of either sex in obtaining employment. Moreover, it would act as an inducement to preserve the good character therein recorded.

By means of these certificates, it will also be found possible to reach the parents of pupils, to induce them to send their children more regularly, and allow them greater opportunity for home study. In many schools, it is customary to distribute certificates after the annual examination; but why should not such testimonials of merit be given to all who earn them, every quarter, or even month?

Honourable Mention in Reports. — Quarterly or half-yearly reports of each standard may be sent to the mana-

gers, with honourable mention of the scholars who have even distinguished themselves by good conduct, punctual attendance, and application to study. A child who has been thus commended a certain number of times, may become eligible for some extra treat or privilege. Zealous managers can do good service, by merely making a formal appointment to read out the names so honoured, with appropriate ceremony, before the whole school.

Inscription of Names on Honour Lists.—In some conspicuous position in the school, a framed tablet may be hung, on which to inscribe the names of those who deserve commendation. In some large schools, three tablets are kept—one for those who distinguish themselves by their attainments, another for any whose *conduct* is commendable, while a third records the names of all who have made the complete number of attendances.

Decorations.—The success of this kind of distinction depends entirely on the tact of the teacher. By her own ingenuity and power of management, she may render the wearing of such a badge, an honour to be more coveted than gold; or she may, on the contrary, cause it to be slighted and despised.

Great care must be exercised with these—as well as with all other—honorary rewards, not to make them too common. They should be bestowed with care and judgment, and worn only for a limited time.

If a pupil, wearing a badge of honour, should be guilty of some neglect of duty, he should—as a general rule—be exempted from punishment, for a single offence. Should the fault however be a serious one, he must as a punishment be deprived of the decoration; for it would not be fitting that one wearing a badge of merit should undergo correction.

A golden rule for teachers is—"Let all such distinctions be reserved for *the few*—the very best."

Praise.—Praise is, in itself, no small recompense, if it is employed in the right way. Yet, like all rewards, it may simply minister to vanity and selfishness, if unwisely used.

The bestowal of praise has its advantages and its dangers. It may always be given privately to those who deserve it, but it is rarely safe to praise a pupil before his companions. Some children are very easily spoiled by any approach to public commendation. Even if deserved, it is apt to become, ere long, the sole object of the pupil's aspirations, and thus engenders conceit, vanity, and ambition of the baser kind. General commendation of a whole class or school is, when deserved, for the most part both a safe and pleasant proceeding, but it must be given with dignity, and couched in appropriate terms.

Praise should be bestowed for the conscientious use of opportunities and abilities, rather than for sharpness or talent. It should never be dealt out as a reward for performing ordinary duties which are binding upon all.

Teachers should take care to praise the right child at the right time, otherwise he may be discouraged, and think that his efforts to excel are unnoticed. A long speech is not needed; a single word, or even glance, is often sufficient. It is unfair, as well as unwise, for teachers to be always ready to frown, and punish misdemeanours, while they withhold approval of a child's well-meant exertions whether successful or not. Every child, even the very worst, deserves praise sometimes, just as the very best is sure, now and then, to deserve censure.

To sum up—praise, whether given privately or before the whole class or school, whether for pains-taking diligence, for high principle, or success at lessons, should be administered sparingly, and never without due thought. We may learn a lesson here from a celebrated French artist who was so sparing of his commendation, that his pupils came to prize his "*Pas mal*" more highly than the most elaborate encomiums from any other master.

Prizes.—Prize-giving in large schools is open to many objections. When such rewards are held out to school-children, it is essential that they should be attainable by all, and that they should be a recognition of honourable effort rather than of talent. These conditions are violated when prizes are given merely for attainments. In such cases, only a few can receive them, therefore only a few are stimulated. If all the children in a school had equal abilities and the same external opportunities and influences, it might then be wise to give each one a prize if he reached a certain standard of perfection in a given time.

Besides the difficulty there is of so awarding prizes as to do justice to all, it has been found that some children cease to be diligent directly the prize is withdrawn, thus shewing plainly that the stimulus was an unwholesome one. Children have often been known to remark, that such-and-such a schoolmate is good and diligent "*because* he is trying for the prize." Parents, too, sometimes receive a wrong bias from prize-giving. They may either feel a foolish pride in the clever child who wins the reward, or shew anger towards the one who *loses* it. Again, if in their estimation their own child is the most meritorious, they often complain loudly of the teacher, and announce that favouritism has been shown.

Prizes for regular attendance are productive only of good. A general distribution of presents, also, to all except those in disgrace, brightens up the children. And a small prize given to the winner of some competition, is at times much thought of—even if it be only a bunch of flowers, an orange, or a pocket pen.

Punishments.—Correction being a repressive and coercive measure, it becomes lawful only after other means have failed. The idea that one principal part of the management of children consists in perpetual punishment, is a common one with young people, and often forms part of the code of

inexperienced teachers—even though they would shrink from acknowledging it. Such raw instructors of youth soon alienate the love and esteem of their pupils by incessant reprimands and correction. In much the same way, an ignorant lad may sometimes be seen beating an unfortunate horse, which an experienced driver would manage with a word of direction or encouragement.

Let punishment, then, be regarded as a last resource, and one to be greatly deprecated, and let the teacher learn to rule her little kingdom by other means. If the children are supplied with attractive occupation, and are kept in order by steady, continuous, and consistent discipline, if the first slight fault, the first breach of the school-rules is noticed and visited (in some way) on the offender, while fair competition is stimulated by a judicious system of rewards and privileges, there will not be much call for a penal code, and coercive measures will come to be looked upon as quite the exception.

It is not denied that there are certain faults which ought to be severely dealt with—such as cruelty, deceit, bad language of any kind, or *revolt* against authority; but minor defects ought to disappear under the influence of a wise and firm government.

What Punishments are not Allowable.—To begin with, there should be in every school a strict rule, prohibiting the teachers from hitting, or even touching a child—whether with the hand, or a pointer, ruler, book, or anything else. Even to touch a child by way of caress is undesirable—how much more unbefitting a teacher is it to pull or push children into their places when drilling or otherwise, to box their ears, pull their hair, rap their knuckles, etc.

Corporal Punishment.—A very great deal is said and written in the present day for and against corporal punishment. It is, after expulsion, the severest measure that can be had recourse to in the correction of a school-child. Taking

for granted the tacitly-assumed right of a teacher to inflict bodily chastisement, it becomes imperative to consider its expediency, and the offences for which it should be resorted to.

It has often been asserted that corporal punishment both degrades the culprit and lowers the teacher in the esteem of the pupils. These results do not necessarily follow, provided that the punishment is inflicted by the proper person, in a just and temperate spirit, and that the child is made to see that other corrective measures have failed to reduce him to submission.

If teachers shew their pupils that they have only their interest at heart, if the milder modes of discipline are discreetly carried out, and the better feelings of the scholars appealed to in flagrant cases of wrong-doing, they will always so far carry the school with them, that they may safely use extreme measures in extreme cases. Teachers must remember that in the use of any penalty, the frequency of its occurrence lessens its force, and this is especially so with corporal punishment.

The offences generally acknowledged as deserving bodily chastisement are dishonesty, falsehood, cruelty, immoral conduct and speech, profanity, open defiance of authority, and persistent disobedience. Small offences become great, and have an immoral taint in them, when they are of very frequent occurrence. In the case of children who seem to be the pests and bane of the school, corporal punishment, as a corrective measure is often better than expulsion, for the last-named proceeding pains and humiliates the parents, and affects the whole career of the pupil by branding him with a kind of infamy.

Censure.—Since praise is reckoned among the rewards and incentives to be used in school government, so censure must be placed among its punishments and deterrents. The same precautions must be observed in the use of blame as in the bestowal of praise. As praise should not deteriorate into

flattery or coaxing, so blame must not pass into scolding, perpetual fault-finding, or ridicule. A rebuke when administered, must, on the teacher's part, be equally free from levity and bitterness.

The reproof which comes from a beloved and esteemed teacher will always prove a powerful mode of checking wrong-doing. Individual private remonstrance is often more effective than open rebuke, because the pupil sees that by such a course his feelings are taken into consideration. Private expostulation also, to a great extent, deprives the culprit of the unwise support of his schoolmates. When the welfare of a whole class or school is concerned, the censure must of course be a public one.

Threats should seldom be held out, but a pupil may be warningly spoken to or looked at, when he seems on the brink of wrong-doing. If he still persists, he may be taken apart and remonstrated with; and, after this, a whispered word—or look—of reminder will often be a help to the child in striving against his perverse, headstrong nature.

Oh, let all believe, that *love* will devise many an ingenious plan for bringing a scholar to submission before resorting to extreme measures; yet the self-same love will not shrink from inflicting merited chastisement, when it is for the true good of the child, or necessary to maintain the high tone of the school.

Punishment of Public Faults.—Such a fault as setting a teacher at defiance must be visited with swift retribution, lest the evil contagion spread throughout the school. Nevertheless, teachers should avoid anything like public humiliation of the elder scholars—unless they have been guilty of some grave sin of cruelty, meanness, etc., which leaves no alternative. They must remember that—as boys and girls grow older—it is a mistake to deprive them of that feeling of self-respect which will save them from so many youthful indiscretions.

When an older pupil refuses to obey, in the presence of the rest of the class, it is a good plan to look at him sternly, and ask—"What do you mean by this?" and then add—"Remain after school to speak to me." A kind but serious expostulation in private, dictated by the teacher's evident desire for the pupil's good, will often win him, and may be the turning point in his life. But the teacher must appeal to him on religious grounds, point out the true remedy for his fault, and shew him where alone strength to overcome evil can be found. Then the words must be *hopeful*. Those who have not had large experience of young people, have little idea how easily they are led to despair of themselves. This despair lies at the root of much of the recklessness they exhibit, and is sometimes fearfully aggravated by the scolding type of teacher—who constantly assures the child that he "will come to no good," or remarks, in his hearing, that "He has not one redeeming point."

Teachers should Refrain from Open Complaints.—General complaints of the school or the conduct of the children, made before the latter, cannot fail to render teachers unpopular. Teachers should not even refer, in the hearing of the scholars, to their poverty, ragged condition, or other circumstances. On the contrary, let all who have charge of children invariably look on the bright side, and if they say anything on the subject of the school to outsiders, let it be by way of cheerful commendation. If they make *any* remark about teaching, let it be to declare what delightful and interesting work it is, when looked at in its true light, and undertaken from high motives. Unless they can edify and encourage their hearers by letting them see a bright, happy labourer in the fertile field of education, they can at least be silent.

Sending a Pupil to the Head-Teacher.—This is a form of punishment which the assistant teachers should not

employ, unless absolutely needful. It is far better to battle with the difficulty themselves, if possible; their class will respect them all the more. Still, discipline must be maintained at any cost, and the pupils made aware that the younger teachers are not afraid to fulfil their duty.

Vague and general accusations to the head-teacher of the standard they are responsible for, must be always avoided by the assistants. To rail at a whole class, is a kind of injustice that is certain to be resented by the children. Some teachers have also an exasperating, fretful way of fault-finding, which is never productive of the slightest good, and which is either a vent for their own ill-humour, or a confession of their own incompetence.

Justice, above all, is Necessary.—Before all, it is needful that any penalty allotted shall be strictly just. It is sometimes painful to inflict punishment upon a child that is habitually docile; but if it is deserved, no difference ought to be made. Justice demands that the correction shall be proportioned to the offence—though rather less than greater.

A teacher must guard very carefully against hasty accusation. Never should she tax any child with dishonesty or falsehood, unless she has the clearest proof of his guilt. Supposing an article is actually found in a child's possession, it does not *always* follow that he is a thief; and, in addition to the injury which injustice inflicts on the children themselves, nothing more surely irritates parents and wounds their feelings, than the bringing of grave charges against their offspring.

How to Punish.—Having now warned teachers of possible mistakes in administering reproof or chastisement, we will suggest a few modes which may be effectual both in deterring a pupil from repeating an offence and in hindering others from following the bad example.

The best form of punishment undoubtedly consists in deprivation of some valued privilege. Thus—as we said

above—the loss of a mark or a check ought to suffice for ordinary occasions; the deprivation of a badge or the erasing of a name from an honour-list, for offences of more serious import. We will suggest a few other penalties which experience has proved to be efficacious.

A Place of Disgrace.—To have a place in the schoolroom to which an idea of disgrace attaches, sometimes answers well. A table and chair in the corner of the schoolroom will suffice for this. The delinquent takes his place there, and follows all the lessons done by the rest of the class, but is forbidden either to speak, or to take his turn in reading and reciting. This punishment, like others, should not be made too common; nor should a child be subject to it for longer than one day.

Writing an Apology.—A pupil may be required to remain behind, while the rest of the class go to the playground, and write a formal apology to the teacher; or make a neat copy of something chosen for the purpose. The plan of requiring children to write out the same word fifty or a hundred times, cannot be recommended, as it encourages careless scribbling.

No Punishment should cut off a Child from Study.—All penalties should be sternly interdicted which interfere with the course of study, even in the case of a single pupil. No child should be put to stand on a form, etc. It is a manifest absurdity to place a scholar where he can watch all that is going on, and yet is not obliged to work. This is exactly what an idle child enjoys, and if some thoughtless, ignorant teacher turns him out of the room, his triumph is complete!

An older scholar may, however, be made to feel the consequences of a fault deeply, by being forbidden, for a whole day, to take his turn in answering, reading, or reciting. It is a sign

of a good, well-managed school, when this prohibition is felt to be a real depri vation.

No child should ever be locked up anywh ere alone. The consequences of this may be very serious.

Keeping In.—This is not a punish ment to be recommended, though it seems, at times, unavoidable. It is hard on the teachers when they are already exhausted with hours of trying work, and it tends to destroy the true idea of *school* in the children's minds. A child can hardly feel a warm love for a place in which he is forcibly detained by way of punishment. It is, however, allowable to keep an idle, troublesome child for ten or fifteen minutes after the school has been dismissed, that he may complete some neglected task, or write a suitable apology or imposition. This also affords opportunity for the teacher to address a few words of remonstrance to him alone.

Black Book.—A strong deterrent may be found in a "Black Book," or "Roll of Dishonour." In this book the names of pupils persistently refractory may be entered, to be shewn to the managers, or others, at their next visit. If the entering of names in the *Black Book* is accompanied by a certain amount of ceremony, it impresses children greatly. They should always be told that the entry will be, to a certain degree, cancelled upon their shewing proofs of amendment.

Degrading a Child to a Lower Standard.—This is not permissible, though it is sometimes done. In a school under Government inspection it may almost be termed illegal; for though children can be now classified according to the teacher's discretion, and moved from one standard to another, it is on the clear understanding that their education will benefit thereby. No idea of disgrace should therefore attach to the change. Besides, it is selfish in teachers to desire to pass on unsatisfactory scholars to others.

Enlisting the Public Feeling of the School.—For any very disgraceful fault, especially for a misdemeanour calculated to reflect discredit on the whole school, it sometimes answers for a teacher to confront the offender formally with his companions, and enlist public feeling against the offence—asking them to shew their sense of the wrong-doing by shunning his society till he shews sorrow for the past and signs of doing better in future.

Children not to be Punished at the request of Parents.—It is the office of parents to chastise their children far more than it is the duty of the teacher to do so, and they ought not to be helped to shirk the responsibility. Neither, on the other hand, must teachers send messages or notes to the parents, requesting them to correct their children for school delinquencies. This would make the school exceedingly unpopular, and be unfair to the father or mother.

In all communications held with a parent, the teacher should say the best she possibly can of the child, dwelling upon the good points of his character, and praising such talents as he may possess. However cognizant parents may be of their children's faults, it angers them to be told of them by other people.

At the same time, a head-teacher—whose duty it is to interview the parents—should seize any favourable opportunity to enlist their co-operation in the great work of education, by reminding them how much more powerful is the influence of the home than the school; how precious is the charge that has been entrusted to them by Almighty God; and how needful it is to uproot faults, and implant good habits in early youth.

Additional Suggestions.—To sum up:—Let all teachers make it their aim, by wise management and firm, consistent discipline, to render the necessity for punishment a rare and exceptional occurrence.

If they are compelled to punish, let them take care that any

penalty they inflict is—(1) just; (2) charitable; (3) moderate; and (4) prudent, that is, such as will benefit the child, tend to maintain the high character of the school, and be followed by no unpleasant consequences.

They will find that, if they strictly observe the following rules, the need for punishment will be reduced to a minimum. Some of the points have been already insisted upon in the course of this volume, but they are so important that, even at the risk of being wearisome, we repeat them here:

(*a.*) Keep strict guard over yourself—your manner, temper, etc. Be punctually at your post, and shew yourself invariably cheerful, assiduous, firm, just, and moderate in all things. Avoid all conversation apart from your duties with anyone whatever, during school hours.

(*b.*) Take up a good position, from which you can supervise *the whole class*. Let the pupils feel that your eye commands them.

(*c.*) Arrange the children with care and judgment—putting the most studious at the back, and those who are inattentive nearer to your desk; never allow talkers to sit together; separate friends if necessary.

(*d.*) Provide against interruption. Discourage all unnecessary coming into the room, messages, etc. Have *everything* made ready in advance; *not* three or four pens missing, broken nibs, thick ink, readers mixed. Each bit of slovenliness is a separate trap for disorder and bad behaviour.

(*e.*) Never leave the children alone; nor yield to the temptation of writing letters, or otherwise employing yourself during school time. Your time belongs exclusively to the children and the school during these short hours.

(*f.*) Appoint monitors for each class or division of a class; train them to distribute and collect, quietly and quickly, all that has to be given out. Have this done while the children are drilling between each lesson. This saves time, and prevents those little unoccupied intervals, which are loop-holes for disorder.

(*g.*) Try to infuse such a spirit of life and vigour into the whole school, that each child shall be interested in his work, and sensible of making steady advance.

(*h*) Arrange that a reliable monitor shall ring the bell, announcing changes of lessons. Let such changes be made instantly, *as a matter of course*, and effected as quietly as possible.

(*i*) Allow no one in the school to receive a private present from pupils or their relations, upon any pretext whatever; even gifts of flowers or fruit should be used for the benefit of the whole room.

(*j*) Ascertain that maps, charts, objects, pictures, drill instruments, music and all other apparatus required are placed ready for use; and spare no pains to provide that all lessons shall be so well prepared for, that they may be given in an interesting and masterly manner.

Should these hints be carefully acted upon, it will be found that there will be small need for either repressive or deterrent measures.

CHAPTER V.

Attention to Details.

IF a school is to be efficient and successful, there must be unremitting care about small things.

In reading the lives of great men, we find that their success turned very much upon attention to details; and nowhere is this attention more needed than in school-management.

It is not enough to start well. Many a teacher, on first taking charge, attends to every minute point; perfection marks her arrangements down to the merest trifle. But, by little and little, she and her school deteriorate. Her excellent rules and contrivances fall, one by one, into disuse, till at last the trail of laziness and slovenliness is over all, and the undertaking that once looked so fair and promising, becomes a miserable failure.

Oh! how can we find words wherewith to impress upon all teachers the wisdom of not "despising small things?" Alas, the evil is often deep-seated! The dirty schoolroom, the dusty apparatus and cabinets, disorderly cupboards, corroded pens, empty ink-wells, tattered books, untidy pupils, and the spirit of muddle which prevails all round, shew that the moth and rust of indolence and low principle have invaded the teacher's own heart, and must be got rid of before there can be any marked improvement.

A good effect may sometimes be produced by persuading such a teacher to pay a visit to a well-ordered school, where the motto seems to be "Perfection in all things," and where teachers and scholars are working with one consent up to this high standard. But what is really wanted is the infusion of

that pure, high, religious principle, which should underlie every detail of our daily lives, leading us "Whether we eat or drink, or whatsoever we do, to do all to the glory of God."

Some of the minor points, which it is most desirable should have unremitting attention, will now be touched upon.

Desk Drill, etc.

Wherever children are taught in classes, there are a number of necessary movements and changes, which ought to be made according to a well-planned code of signals. Inspectors, when judging of the merit of a school, rightly take into consideration the quietness and precision with which changes are effected, books passed and collected, or scholars marched to and from playground or hall. And, truly, the manner in which such operations are carried out, affords a fair index of the discipline that prevails.

In the management of such details there should be one unvarying system throughout a school. For instance, the preliminaries to reading, writing, and arithmetic lessons, and the mode of entering and leaving the class-rooms, should be alike in every standard.

Suggested Methods.—The following methods are suggested, as having already proved of practical use:—

For passing books, pens, etc., give the child sitting at the end of each row sufficient for that row. He takes one and passes on the rest, the next child does the same, and so on to the last.

Books are returned in much the same manner: the monitor stands at the end of each row and gives the word "Pass books." The child furthest from him passes his book to No. 2, who places it on the top of his own, and passes both to No. 3. When all are passed, the monitor counts them to see that he has the correct number, and then puts them away.

Desk drill.—This will vary with the kind of desk used. A

good series of movements for leaving the ordinary dual desks, is as follows:—

One.....(Lay hold of desk.)
Two.....(Turn back flap.)
Three...(Stand.)
Four....(Out of desks.)

Children require to be continually drilled to obey signals in a ready and exact manner. Even to sit down and stand up quickly and easily needs practice; while to bring children out for reading lessons, or to change classes when one set of desks has to answer for two sets of children, is still more difficult.

Marching.—Simple as this exercise may appear, it cannot be done well unless the children have a fair amount of practice. It is by no means an easy thing to teach a number of children to march *well*—that is, with heads erect, shoulders thrown back, line kept even, steps taken briskly and in time. When there is no drill-hall, and the class-rooms are crowded, there is a temptation to neglect marching, but this temptation should not be yielded to. A teacher of *resource* will contrive some way of giving the children this important exercise: for it *is* important that young people should be taught to walk properly, and be cured of poking, stooping, and shambling habits. They should not be trained either to stamp or to walk on tip-toe—this last produces a hobbling gait—but to plant the whole foot well upon the ground, turn out toes, and tread lightly and firmly.

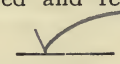
When it is practicable, and especially when children march into (or back from) the play-ground together, they should do so in time to a march played on the piano, or a song sung by themselves.

A light, firm step is not acquired at once; indeed it needs a little time and patience to make sure that the pupils really obey the elementary direction, "Left, right; left, right."

Personal Neatness must be exacted.—Children ought not to be allowed to come to school with dirty hands

and faces, torn pinafores and ragged frocks. The parents will form a far higher opinion of the school if they find that dirt and rags are not tolerated. A mother may be poor, but she can, at least, wash and mend her children's clothes.

In some districts, a few moments' inspection of the children, as they march past the teacher at the commencement of morning and afternoon school, is advisable. All who have dirty hands or faces should be sent to wash them, and incur some penalty. Those with ragged and soiled clothes should be spoken to alone (for it may not be their own fault), or the parents should be visited and remonstrated with on the subject.



Manners.

Teachers should do their best to inculcate the laws of good breeding. If such instruction is begun when the children are quite young, it will be accepted as a matter of course. It is often said of a certain school, "You can tell the children brought up there, years after they have left, by their courteous bearing." Yes, but why should not this be one result of all education?

Some people may object—"Oh, surely teachers have enough to do without teaching *manners*—except so far as the children's behaviour in school is concerned!" But this is not quite the right view to take of the subject. Children require definite instruction in courtesy, and, unless this training is given in school, many of them will never have it at all, but will grow up without that advantage which a pleasing address undoubtedly confers. Perhaps we shall see more plainly the necessity for educating children to be courteous, if we reflect that the politeness to which we refer is *not* the artificial veneer with which civilized nations seek to conceal their natural selfish roughness, and which is often assumed for purposes of gain or policy. No; the good manners we would teach rest on the fundamental principles of strict

honour, forbearance, generosity, and Christian love. It is the virtue to which the Apostle alluded when he bade all—"Be pitiful, be courteous," "In honour prefer one another."

"Manners are the shadows of great virtues," says Whately; and we may well add—manners should be the outward evidence of the "Charity that is *kind;*" for courtesy really means—"Doing the kindest thing in the kindest manner."

Manners must be taught by Example.—Children are naturally imitators, and it is therefore of real moment that teachers should, in their own persons, exemplify true courtesy. Besides, the rule which should guide us all, in this matter, is—"The higher the position, the greater the politeness."

The whole bearing and manner of one who leads others should be above criticism. Teachers should especially avoid—awkwardness in posture, and lounging habits; carelessness in dress; and everything that approaches affectation. Let teachers be *themselves*, and guard against all that is opposed to a frank, natural manner. Let them, moreover, remember the dignity that attaches to their office, and do nothing to lower that high ideal which people instinctively form of what they ought to be. This will keep them from frivolity, levity, and over-familiarity *with anyone*—even with their pupils.

Let them eschew unpunctuality, gossiping with fellow-teachers or others, and all waste of the time which ought to be so prized. Teachers whose habit it is to walk (or ride) to school each morning, reading some trashy periodical, or indulging in idle and thoughtless talk, shew—we may assert without affecting puritanical strictness—a sorry appreciation of their high calling, and of the importance of those duties in which they are about to engage. Let them remember, too, how much depends upon their own fidelity to the order of the various exercises. *They cannot be too punctual.*

Many teachers have little idea how closely their deportment is watched by the elder boys and girls of the school, and how just are their strictures when they fall short of the

standard the pupils have formed of what their teacher's bearing should be.

Manners must be taught by Practice.—Such practice in politeness as school-life affords, should be diligently taken advantage of. Children should be taught to bow and say "Good morning" or "Good afternoon," when entering and leaving school. The elder boys should be trained to lift their cap in the street, when they meet ladies they know or anyone to whom they owe respect.*

The scholars should be encouraged to proffer their teachers little incidental services—such as picking up anything accidentally dropped, handing chalk or eraser, offering a chair, helping to put things away at the end of school, carrying parcels to the tram or station, and so forth.

They should also be trained to receive properly those who visit the school. The child who answers the bell or opens the door should politely invite the visitors to enter, apprise the head-teacher of their arrival, find them seats, and shew them any other attention the occasion may seem to demand.

Manners must be taught by Precept.—It is obvious that the schoolroom alone will not furnish sufficient illustrations of the usages of good society, and we therefore strongly recommend teachers to draw up a series of lessons on courteous behaviour, and give them regularly in the school. Very beneficial "object lessons" might be put together upon "Manners at home, in the street, in public conveyances, and at places of entertainment; also on the treatment of the aged, the very young, the deformed and afflicted, strangers, and so on."

*Opinions differ on the way boys should be trained to salute, and our ideas may, perhaps, be considered too *progressive* when we say that we think it is time the peculiar *salaam* taught in many schools should become a relic of the past. But we would beg our readers to take a common-sense view of the case, and ask themselves whether it is not better to teach, at least the elder boys, a mode of salutation which they will use through life. Who can blame the big country lad if he now slinks past the Rector's wife or his late schoolmaster, because it is repulsive to him to tug his forelock or describe a half-circle with his hand?

Children do not realise *instinctively* that it is rude to turn and stare at a person in the street, to jostle people off the pavement, to push first into a tram-car, or to obstruct the pathway. They need *to be told* that they should not enter a private room without knocking, nor look over a person's shoulder when he is writing a letter, nor burst out laughing when a man has his hat blown off, or when he slips down in the street.

The Principles underlying Good Manners must be Taught to Elder Children.—Pupils who are old enough to understand, must have good and high motives set before them, for the self-restraint which we ask them to exercise. They must be shewn that courteous bearing implies much more than outside show, and that even what seems a mere form is often grounded upon kindness and common sense. It should be represented to them that they would not like, when they grow up, to be thought ignorant of what the best and wisest people have agreed to practice; on the contrary they would naturally wish so to act that they might be classed with them. Not that they will have to be always thinking about how to behave, when they are older; that would be most undesirable. But those who take the trouble to learn and practice the customs of civilised society when young, will observe them unconsciously when older—for they will have become a fixed habit.

Respect for all in Authority must be Inculcated.—It is during their school-days that children should learn that respect for all who are in authority, which will make them loyal and dutiful citizens in the future. The simple lesson that lawful authority comes from God, and that, on this account, respect and obedience are due to it, is what the teacher has to enlarge on. It is manifestly unsuitable to imbue children's minds with party spirit, or to bring before them purely political topics. Neither is it the place of an educationist to express decided opinions as to the respective value

of different forms of government, or to extol one above another. Even if it were possible to decide such a difficult question, it would not be a fitting subject for school. To instruct children that the *powers that be* must be obeyed, and that we, as Christians, should not be swayed by *party* considerations when a principle is at stake, is the duty of the teacher.

Children should be taught respect for the Property of other People.—They cannot learn too early to respect the just claims of others. They must be frequently admonished as to their behaviour out of doors, and strictly forbidden to throw stones, to tread upon the steps of the neighbouring houses, to break the plants or shrubs, to shout, loiter about, or in short make themselves obnoxious in any way. They should be taught that their duty towards their neighbour, no less than the honour of the school, requires that they comport themselves as Christians and civilised beings, shewing regard for the feelings and property of others. Street monitors should be appointed to see that all scholars disperse quickly and quietly—one or more of the teachers always standing near the school door, to note the children's behaviour, and exert proper control over them.

School Apparatus.

Teachers cannot work without proper tools. If a school is to reach the required standard of efficiency, there must be a liberal supply of desks, black-boards, maps, books, manuscript paper, and slates. Of course, strict economy should prevail, and no waste of any kind be tolerated. But economy is not parsimony, and teachers who feel that (through lack of apparatus) they can do justice neither to the children nor to their own teaching, should respectfully lay their needs before the school-managers again and again, until the deficiency is made good.

They should also point out when the walls and ceilings are discoloured through dirt, or the woodwork needs a coat of varnish; and ask that the summer holidays may be utilized for a thorough cleansing and re-furbishing of the premises. Should the arrangements for cleaning the school and attending to small repairs not be satisfactory, it would be the teachers' duty to represent the matter to the Committee.

A Teacher has much in her own Hands.—Even supposing that managers are generous in providing all that is wanted for the good conduct of a school, there is sometimes much to be desired in the way the apparatus and the rooms are kept, and for this the teacher alone is responsible. Here, as elsewhere, the proverb holds good—"Where there's a will there's a way." The teacher who is determined to have a bright, well-ordered room, will contrive to have it.

It is hardly too much to say that a very fair idea of the efficiency of a school may be formed by examining into the condition of the books, slates, maps, work-materials, pens, pencils, etc. There are *details* connected with all the articles in use, which require ceaseless attention, and each teacher will do well to put herself, periodically, through some such examination as the following:—

Are books carefully handled and neatly put away?

Are maps always restored to their proper place as soon as done with?

What provision do I make for the cleaning of slates; and are they ever put away in a dirty state?

In what condition are the ink-wells? Are they always well-filled, *and in their right place?*

What about pencils and pens? Am I careful that the former are of proper length and well-sharpened, and that there is a sufficiency of pen-holders? Are the nibs invariably wiped when the writing lesson is over, and new ones substituted when necessary?

Am I careful about manuscript-paper and copy-books? Do

I see that the children keep them clean, fill up all the spaces, never tear or deface them, and only use what is absolutely necessary?

Ink-wells should not be washed, but the tops cleaned with a piece of sponge. If the inside needs cleansing, this should be done with a painter's small brush dipped in vinegar, but it will usually be found sufficient to refill them.

Pieces of rough stone for sharpening slate-pencils should be fixed in convenient places.

Pens should be of good quality, and children should be trained not to strike the bottom of the ink-well when dipping them in, since this quickly ruins the nibs. They must, moreover, be supplied with pen-wipers, and forbidden to wipe pens on their clothes.

In girls' schools, needlework materials may become a fruitful source of waste, unless the mistress is vigilant to avert it. At the end of a lesson, needles should be collected. Cotton should be first wound round a large piece of cardboard, and then cut in uniform lengths, before being given to the children. Thimbles and scissors must always be counted before being returned to the work cupboard. In large sewing-classes, two of the elder girls ought to take turns in giving round cotton and other necessaries.

These things may be regarded as trifles by some. But let us not forget that—"Trifles make perfection, and perfection is no trifle." It is attention to such small matters which often marks the difference between a good school and a bad school. To those who have a high conception of the duties of their vocation, such things have an importance far beyond their intrinsic value.

Illustrations.

It is not our intention to descant upon school apparatus in general, but we have a few words to say about a matter

of detail, which—though often overlooked—seems to us deserving of careful consideration. We refer to that illustrative apparatus, with which every school must be provided if the children are even faintly to apprehend what their teachers are talking about.

It seems impossible that too much can be said about the expediency of using objects and pictures, with a view to giving children correct and vivid impressions of what they are taught. It is recorded of the late Mr. Thring, that he said he should like to teach even *algebra* by means of pictures! In principle, he was perfectly right. What a child sees—he comprehends—he remembers.

Blackboard Drawing.—A great deal is now written about this kind of illustration that is unpractical. People speak as though every teacher ought to be able to sketch from memory—and in about five or ten minutes—animals, trees, buildings, the human skeleton, machinery, etc., in a masterly manner. There are not fifty teachers in England who could do anything approaching this, for it would need artistic genius of a very high order. Nor would the benefit be great, after all.

At the same time, it must be confessed that *practical* blackboard illustration is much neglected. There are few lessons which might not be improved by a rational use of the chalk and board. How often teachers speak of the veining of a leaf, the shape of a root or flower, the form of an arch or gable, or of the square, oblong and triangle, without attempting to make their meaning clear by a few swiftly-drawn lines. Why is this? We believe there is, at times, no better reason forthcoming, than that the board is not at hand! Incompetence is often pleaded as an excuse, but a little daily practice and a great deal of resolution, would overcome this obstacle.

It is a reproach to teachers when they cannot write quickly and well on the board, and draw such simple forms as are continually needed to make their meaning clear.

Pictures.—A classified collection of pictures should form part of the *plant* of every school, and teachers should spare no pains to enrich their portfolio by every means open to them. Illustrated journals, children's magazines, old books with plates of plants and animals, views of scenery, celebrated buildings, historical scenes, national costumes—all these and many more will be exceedingly valuable as aids to education. It is clear that they must be used with care and judgment. The design is not to amuse, but to instruct. It is possible for the children's attention to be so concentrated on the picture that they lose sight of the lesson it illustrates. Not more pictures should be shewn each time, than can be thoroughly made use of and *observed;* a single one is often sufficient for a lesson.

There are two ways of using pictures for class illustration. Some teachers give their lesson *from* the picture —pointing out to the children, as they go on, the parts which explain their meaning. Others give the lesson first, try to excite the children's curiosity, and finally produce the picture. To allow the class to glance casually at a number of such illustrations, as though they were looking at a scrap-book, would manifestly be a waste of both their own and their teacher's time. Natural objects and stuffed birds and animals are likewise very useful and interesting. The bringing of live animals into the schoolroom is inexpedient for many reasons, and quite unnecessary.

Illustrations by Experiment.—This branch of illustrative teaching is an indispensable accompaniment of lessons in chemistry, but it would be impossible to enter upon so wide a subject in the present volume.

School Museums.—The collecting of curious and interesting specimens from the three kingdoms of nature, and the grouping of them in school museums, has become very general of late years. There is, however, a danger lest they de-

generate into mere curiosities, to be regarded with wonder and admiration by the children, rather than as objects illustrative of any lessons on general information which the latter may receive. A small cabinet filled with more homely specimens, attached to each class-room, is better for educational purposes than a general museum for the whole school upon a more elaborate plan, when both cannot be had. Children should be encouraged to bring contributions to the museum. They will often take great pride and pleasure in helping to form a good one.

Sundry Details.

External Appearance of the School.—All arrangements should conduce to make the school as attractive as possible to those who occupy it. Pavements, paths, and playgrounds, should be well swept and kept free from litter of all kinds. Gates and palings must have a coat of paint whenever necessary, and be kept clear of dust. If there are flower borders, these must have constant attention, and the children be trained not to injure the plants.

Interior of the School.—Let the eye of the teacher be quick to note dirt, dust, or untidiness of any sort—torn paper, dead flowers, etc., and let her shew no quarter, but give the caretaker to understand that a clean, bright school is a necessity to a good teacher. Pictures must be well hung, books and apparatus in good repair, the floor free from ink-spots, cupboards and desks in perfect order, and everything in its proper place, in the ideal school.

On this subject, Mr. Hitchins, H.M.I., says—

> "Much might be done to keep the schools cleaner and more tidy. There is a polishing up for the inspection, but the few visits without notice I have had time to pay during the year, have shewn me that many schools are very dirty, that hats and coats on the floor excite no surprise in teachers' minds, and that the ventilation constantly wants looking after."

These words convey a keen reproach. Surely this is to work "With eye-service as men-pleasers."

Supervision of Play-ground. — No conscientious teacher will leave her class without supervision in the play-ground; for it is here that well-brought-up children learn bad habits and profane language. Besides, it increases a teacher's influence largely if she evinces sympathy with the children's play, and helps to start suitable games. Frœbel has shewn us how much may be taught by means of amusements, and nowhere are his sound principles more applicable than in the play-ground. Again, while a teacher should carefully avoid acting policeman, she should yet keep a strict though unobtrusive supervision over her charges, never allowing two or three children to separate themselves from the rest to talk privately, stopping rough games and horse-play, and prohibiting all that might injure the children, their clothing, or the school property.

Ventilation.—Since, to a certain extent, not only the moral and intellectual training, but the physical well-being of school-children is in the power of teachers, it behoves them to see that their arrangements help to promote the bodily health and vigour of their scholars.

This remark is made in order to call our readers' attention to a matter of detail which is, too often, little thought of, viz.: —the ventilation and warming of the schoolroom. Impure air, and insufficient or excessive warmth, make children at once dull and restless. Before school commences, the head-teacher, or some competent person, should ascertain that due provision is made in every class-room for the admission of fresh air, and the providing of warmth when necessary. Children should not be exposed to draughts and glaring light. Monitors should be instructed to pull down or draw up blinds, and to open and shut windows, as is most expedient.

Between school-hours, and while children are in the play-

ground, doors and windows should be set open and the air thoroughly changed.

Foresight.—The faculty of looking forward and providing for contingencies is not less valuable in school-work than in any other important undertaking. Each teacher should enter school with the day's work mapped out in her mind, and any consulting of time-tables should be done previous to the commencement of teaching. Foresight is especially incumbent upon the principal teacher. All arrangements for special examinations, addresses to the children, school-holidays and festivals, should be made well in advance. Necessary apparatus ought to be replenished before the stock is completely exhausted; *e.g.*, to wait till the last slate-pencil is in use, or the last drop of ink has been drained from the bottle, before asking for more, is bad policy and false economy.

Just as, previous to the opening of school, all apparatus, books, and other necessaries must be placed in readiness, so, in the course of the lessons, whatever is not wanted should be at once restored to its place. At the close of school, there should be a general straightening-up of each room. Everything should be put neatly away, blackboards and slates cleaned, the chalk shaken from dusters, plants watered, and the clock attended to if needful. This is also the best time to sharpen pencils, and inspect penholders and inkwells.

After school-hours on Friday, each teacher should make a careful examination of all the school property under her care. Books, pens, and pencils, should be counted, and their condition noted. Cupboards should be put in perfect order, and all so prepared for the opening of school on Monday morning that there shall be no *details* left to claim attention at that busy moment.

On Friday afternoon, too, the teachers should apply for such stores as they require. These applications should be made *formally*, and at a specified time. All stores given out

ought to be entered in a book kept for the purpose, and the entry signed by the teacher for whose use they are allotted.

What a Child is required to do, he must be Trained to do, is a truth which cannot be too often repeated. Pupils can be trained to walk and move quietly, to keep silence, to speak gently and distinctly; in short, to do anything which the teacher desires to be done, and in the way she desires it. But she must first explain clearly to the class what she wants them to do; then, she must accustom them to do this instantly and with great precision, at the word of command.

It will be found the same with everything. Let the children and subordinate teachers once realise that the teacher-in-charge is *determined* to have perfection in details, and they will fall almost unconsciously into her ways. They may chafe a little under her rule at first, and perhaps think her fussy about trifles; still, they will soon reap the benefit and recognise the advantage of such conscientious care, and will become, in their turn, warm advocates of—*Attention to Details.*

CHAPTER VI.

How to make Teaching Efficient.

IN the foregoing chapters, we have had under consideration some important questions: among them—how children can be so trained, as to be not only perfectly obedient and orderly, but to concentrate their thoughts upon the study of the moment; also, how teachers, if they are to achieve success, must pay unremitting attention to details. We may now ask—Is this all? Decidedly not. The minds of the children having been fitted and prepared for the reception of sound and suitable instruction, the teacher must next proceed to gratify the appetite for knowledge which she has tried to excite. She must be familiar with every subject she has to teach, and spare no trouble to make her lessons instructive and *pleasant*.

The Exercises should be made Interesting.—To this assertion we can imagine a score of objections will be brought forward, as—"How can we make such subjects as sums, spelling, and grammar, interesting to young people? We might do *something*, provided we were allowed to use our own plans; but, weighed down as we are, by an iron Code, etc., etc."

We make answer to this—that doubtless there are difficulties in the way, but these should only stimulate the devoted teacher to more determined effort. We have a firm faith in the power of good teaching to render the most prosaic subject attractive, and, in the course of these pages, hope to shew that even arithmetic and spelling may be made more or less pleasant to our scholars.

Then the Code, though some of its enactments are still a trial to conscientious teachers, is more elastic than of yore, and shews symptoms of still further changing the material of which it is composed—from iron to india-rubber! The inspector, too, of the present day, is generally a man of enlightened ideas on the subject of education, and *earnestly desirous of the children's true good;* within certain limits, he will accord his sympathy and sanction to any plan for lightening the burden of learning for the little people under his jurisdiction.

It is not so much in the subjects of instruction, as in the manner in which they are taught, that teachers must seek a remedy for the excessive dulness that prevails in so many schools. The children must be provided with *ideas*. The teacher's manner of conducting a class must shew that she is interested in her work, and esteems it an honour and pleasure to instruct the young. It must not convey the impression—"Oh, dear, this is the hundredth time I have heard this same wretched lesson, what a weariness it is!" On the contrary, by her briskness, energy, and alertness, added to a pleasant, smiling face, she must impart spirit and happiness to her class. Manner has a great deal to do with making instruction acceptable; and we shall always maintain that teachers, who shew by their bearing that they dislike children and consider teaching "a bore," are impostors, and ought to retire from this onerous and honourable profession.

The teacher should be full of animation. Her tone of voice, her every look and gesture, should show how deeply concerned she is in the well-being of each pupil. By study and painstaking effort, she must labour to make herself a *perfect* teacher. In *her* calling, there are too many grave issues at stake to allow of mediocrity.

The Lessons must be adapted to the Pupils' Previous Attainments.—All subjects should be presented to children in a manner adapted to their age. Most of

the books on elementary science—physiology, hygiene, botany and other subjects—although written professedly for children, are more suited to medical—and other—students of nineteen or twenty. It therefore becomes the teacher's duty to simplify these, and present knowledge to her pupils in such a form that they can assimilate it. Step-by-step instruction, thorough grounding from the very beginning, and plenty of interesting facts supplied throughout, is what children want. They need, in short, to be taught as nature teaches them, when they first gain impressions through the medium of their senses.

Mental Activity must be Aroused.—Activity both of mind and body is an instinct of childhood. Idleness in the young is so directly opposed to their natural propensities, that, where it is found, it must be either the result of bad education or some constitutional defect. How necessary, then, is it to use every means to utilize and satisfy the mental activity of the scholars! To ensure this, they should not be told what they can easily find out for themselves. It is stated in one of Mr. Hughes's excellent Manuals* that the Welsh word for *schoolmaster* means "one who teaches to climb." So teachers should not merely climb the ladder of learning themselves and throw down treasures to their scholars, but should encourage the latter to exert themselves to attain knowledge. Many children simply repeat after the teacher what they ought to acquire by their own efforts.

All Teaching Should Convey Clear Ideas.—A child who was asked: "When a man gets weak and is easily tired, what is that a sign of?" replied, "It shews that his whole *cistern* has run down." This, and numbers of similar blunders, prove that teachers often give children credit for understanding the words used, while they are carrying away most distorted ideas of the subject. The evil would be obviated, if scholars were trained to ask the meaning of

*Mistakes in Teaching, by J. D. Hughes: Kellogg & Co., New York.

any term not fully understood, and if the plans recommended in this book for teaching the elements of composition were vigorously carried out. Were children taught from the first to express on their slates, and in other ways, the impressions they receive, teachers would have the opportunity of correcting those impressions when they were defective.

Lessons must not be too Long.—It may be said that, in schools under Government, the time-table provides against this abuse. Yes, but is it not the case that teachers sometimes prolong the lesson considerably after the time for a change has passed? This want of exactness and punctuality is at the root of a great deal of the weariness and brain-fag from which the poor children suffer. It is one of the principal functions of the head mistress, or the organising teacher, to see that the time-table is conscientiously kept, and lessons changed to the minute.

We will now consider a process which has much to do with imparting interest to the instruction given—

The Art of Questioning.

This is an art, and one of great importance to the instructor. Indeed, it comes very high up on the list of *essentials* for good teaching. To question well is a proof of rare skill; still, it is not so much a natural gift as the result of careful self-training on the part of the teacher. Those who excel in it will be found to have given themselves diligently to that study which —let us say again—should engross every one who teaches—*The Child.*

Questioning in General.—All who are engaged in the work of practical teaching must be conscious that something more is needed than the ability to impart knowledge

attractively and thoroughly. It is necessary that, by some method or other, three things should be ascertained:—First, what knowledge, if any, is possessed by the children on the subject of a proposed lesson *before* it is given; Secondly, what is being grasped and understood *during* the lesson; and lastly, what is the *sum total* of the results of the lesson.

For each of these stages, one of three processes may be used. The children may be required (*a*) to *tell* all they know in a continuous speech; (*b*) to *write* all they know; or (*c*) they may be *questioned* on what they know. The first method—excellent as it is in itself—is not adapted to quite young children, especially when there are many in a class. The second takes too much time, except in the case of scholars who can write rapidly. The third is the plan commonly pursued at all three stages of the lesson. These we will speak of, for convenience' sake, as the Introductory, Intermediate, and Final stages.

Introductory Questioning is equally desirable whether the subject be entirely new to the pupils, or one with which they are partly familiar. Its chief object is to discover what the children know of the subject-matter of the proposed lesson, thus enabling the teacher to ascertain at which point to begin. This initiatory probing must be brief, and, if skilfully conducted, should not only indicate the teacher's starting point, but also show the children their own deficiencies, arouse their curiosity, and predispose them to receive with interest the knowledge about to be imparted.

Intermediate Questioning requires much tact, judgment, and skill. A lesson must not be a lecture, *i.e.*, it must not be a lengthy address without breaks—this style of teaching not being adapted to the pupils in Elementary Schools. In giving instruction to these children, a definite portion of information—greater or less in quantity according to the standard—is generally given, and then a few minutes are

spent in questioning. Some lessons, especially those on rules of arithmetic or grammar, and most lessons on moral subjects —such as anger, cruelty, or truthfulness—may be given almost entirely by means of questions. These must be asked in logical order, and so framed that, without directly suggesting the idea or fact to be communicated, they should enable the pupils to give the required answer, either from previous knowledge or by the exercise of their reasoning powers. When the proper reply is not given, the teacher should retrace her steps and try again to lead the minds of the pupils towards the answer she wishes to get. If she does not succeed, it will be due either to lack of skill on her own part, or of intelligence on the part of her pupils; and the answer must then be supplied. Test questioning ought to be introduced at the principal divisions of a lesson—not in order to convey anything like fresh information, but to ascertain that the substance of the teaching is really being grasped: this must not, however, be out of proportion to the time at command.

Final Questioning.—This is to be considered as an oral examination. Questions at the end of a lesson should be both rapid and searching, and not in any degree suggestive of the answers to be given. Teachers should only touch on those parts of the subject-matter, which are the most difficult to understand, or most important to be remembered. The easier portions may be left unnoticed. When children know that they will have a lively exercise of probing questions at the end of their lessons, they will certainly feel an additional interest in them. There are marked differences in the oral-examination powers of different teachers. Some persons—by their tact in questioning—seem able to draw quite brilliant replies from children, when others utterly fail to elicit any rational answer.

Question all through the Lesson.—Some teachers only question for the sake of recapitulation. This is a serious

error. As we said above, "Intermediate questioning" is necessary, especially with the very young. One purpose of questioning is, undoubtedly, to test knowledge, but it is not its highest function; this is, to rouse the minds of our pupils to activity, and help them to make discoveries for themselves. It is well said, that "He who imparts knowledge to the human mind is a benefactor; but a far greater benefactor is he who wakes up that mind to seek knowledge for itself."

Another advantage of frequent questioning is to impress facts upon the learners' minds. Few teachers realise how often a subject must be gone over, before they can hope that it will be stamped on the memory of their pupils. Skilled and experienced teachers, when giving object or science lessons, will furnish full, clear instruction upon two or three facts, and then question; they will next add two or three more facts, then question again from the beginning; and so on throughout the lesson. Before concluding, they will have a short, rapid examination of the whole; and they will commence every successive lesson with recapitulation of the preceding one.

Of course, the amount of information, or number of facts given out before questions are asked, must be regulated mainly by the mental capacities of the class. The higher standards should be told more at a time than the lower ones, while, on the other hand, only so much information should be given to *any* standard, as all the children—sharp as well as dull ones—are likely to understand and remember. If teachers must err, let it be on the side of over-questioning, rather than the reverse; and let them take care that no pupil's eye wanders while they speak; if anyone looks inattentive, a direct question should be addressed to him.

Rarely put a question by which a Trap is laid for the answerer.—Such questions as—"What is the eleventh Commandment?" "How many times is the earth larger than the sun?" are a mistake. It is true that the *occasional* use of trap-questions may help to brighten children—

when accepted by them as a little pleasantry; but they must not be often resorted to, and should never be on serious subjects.

Directions for Skilful Questioning.

(*a*) Stand in such a position that every child can see and hear you. Pronounce each sentence distinctly—emphasising any word that requires it.

(*b*) Make every question short and plain, and, as much as you can, an exercise of the children's thinking powers.

(*c*) Let the questions follow each other with a due regard to the natural order of the facts and principles to be taught, *i.e.*, do not question backwards and forwards in a lesson. Such a practice encourages irregular thinking, both in the pupils and teacher.

(*d*) Allow no answer to pass that contains grammatical errors, or slang terms. All such faults should be corrected by the scholars themselves, when possible. This point sometimes requires considerable tact, as children are sensitive about these criticisms.

(*e*) Be prompt; do not keep the children waiting between an answer and the next question.

(*f*) Never repeat what they have failed to hear through inattention. If they do not *understand* what you say, change the wording, and put the question again. Also try not to acquire a habit of repeating, for the benefit of the class, every answer you get, but make the answerer speak so distinctly that all can hear him.

(*g*) Keep your eyes upon the whole class, instead of looking fixedly at the scholar who is speaking. A child is sometimes quite disconcerted by a fixed stare, and begins to stumble and blunder.

(*h*) Never allow children to answer together, unless (for some good purpose) you give them leave to do so for a brief interval. Make them hold up hands, and then select the pupil you wish

to answer, but do not keep the class waiting if he fails to reply. Choose another at once. When a child persists in answering without permission, it is sometimes well to impose silence on him for the remainder of the lesson. In questioning on a reading lesson, it is better that neither the question nor the answer should be in the exact words of the book.

(*i*) Avoid entirely the elliptical form of questioning. This leads to mere guessing, *e.g.*—The eye is the organ of——? Coffee was first introduced into England by——?

(*j*) Let the answering be general. Take care that the sharp children do not monopolise the speaking while the dullards look on apathetically. Make the timid and backward scholars do their share, by asking questions which are more and more easy, till you find yourself on a level with their comprehension. The children who should answer most of the questions, are those of average attainments. Intelligent scholars in the upper standards should sometimes be required to give answers of considerable length.

(*k*) In order to test whether all have been attending, occasionally make the children answer in turn.

(*l*) Avoid putting questions which can be answered by "Yes" or "No."

(*m*) Do not allow the children to speak hastily, or to guess at an answer; but train them to think before they speak.

(*n*) Never put a question which the class cannot reasonably be expected to answer. Teachers are rightly recommended to question from the known to the unknown; but they, at times, resort to the bad habit of *beginning with the unknown*, thus tempting the children to indulge in guessing.

Answering.—At the same time that teachers make it one of their chief aims to question well, they must also bestow some thought upon the best way to accept and dispose of the answers they receive. All the children in a class, even the dullest, must be encouraged to answer by questions level to their capacity. If the answer received from a child is not

correct, or is not properly expressed, the other pupils who have held out their hands, should be allowed to rectify the mistake.

Sometimes wrong, or apparently stupid answers, are worthy of notice, as enabling the teacher to put right some misapprehension of the children, which she might otherwise have remained in ignorance of. Thoughtful, well-worded, distinctly-given answers should receive commendation. A longer time may be allowed for answers requiring more than the usual amount of thought.

A teacher must guard, on the one hand, against requiring an answer to be expressed exactly as she herself may have framed it in her own mind (except in the case of exact definitions or quotations), and on the other, from accepting answers that are uncertain in meaning, or expressed in a slip-shod manner. If an answer is partly wrong, the correct part should be separated from the incorrect.

Children should not be allowed to laugh at each other's answers, neither should the teacher betray amusement or surprise herself, however strange and unexpected the reply may be. A teacher who can contrive to take unlooked-for replies with immovable composure, and turn them to some good account, shews that she possesses rare skill, resource, and presence of mind.

Answers which are very meagre—consisting of a single word only—should not be accepted, yet they must be free from awkward repetitions. Some theorists recommend that children should be trained to repeat the question in the answer, thus :—"Who was the discoverer of America?" "The discoverer of America was Christopher Columbus." A little reflection will, however, shew that this is a mistake. The answer *is the completion* of the question, therefore to repeat the latter is mere tautology. It teaches the children a clumsy, *artificial* style, whereas our object should be to make them speak as naturally as possible. No child if asked, "Which lessons have you learned to-day?" would reply, "The lessons I have learned to-day are——."

Encourage Children to Ask Questions.—Children should be encouraged to ask explanations of what they do not understand—provided their questions bear upon the lesson. It is a natural instinct which leads children to make enquiries about what interests them, and the wise teacher will try to turn this instinct to account. When she is ignorant of the right answer, she ought to feel no difficulty in saying—"I do not know." To some questions she will be forced to reply—"This has never yet been discovered," or "It cannot be known on this side Eternity."

All flippant, impertinent questions, should be met with reproof or silence, and the enquirer forbidden to put any query during a given time. Neither must the children be allowed to ask questions promiscuously or too frequently, as this would be detrimental to order and discipline. For easy subjects, the end of the lesson is the best time. In difficult lessons, enquiries may be allowed at the close of each main division of the subject.

Exercising the Memory.

Importance of Learning by Heart.—Although the principal object of education is to develop the reasoning and observing faculties, still the training of the memory must on no account be neglected. It would really seem as though people must be always in one extreme or another on the subject of education; for, in the reaction from the excessive memory-tests of former times, learning by heart is now unduly disparaged. Yet this exercise will prove of great value to the scholar throughout his whole after-life, besides enabling him to pass examinations with credit during his early years.

Home Lessons must be Carefully Explained.—In assigning memory work which is to be done at home, care must be taken not to give tasks that are too long or difficult; likewise, before they are taken in hand, no pains

must be spared to explain everything that a scholar might possibly misunderstand. Let every word, every phrase, and every allusion be thoroughly understood, before children attempt to commit anything to memory.

First, it must be ascertained that they can read and pronounce each word; next must come the careful explanation; lastly a few quick questions to ascertain that all have received the correct impression.

Scholars should be Taught how to Learn by Heart.—Children should be instructed as to the best way of committing passages to memory. This they will do by first reading over the paragraph twice or thrice attentively and intelligently—so concentrating their thoughts the while upon the subject that the impression made is as vivid as possible. They must, in the next place, deepen this impression by repetition, after the following manner:—

Taking the first phrase or sentence, they repeat it till perfect; proceeding to the second, they act in the same manner; they then say both together, and go on to the third. Having, in this way, reached the end of the paragraph, they close the book and say the entire passage twice by heart. The next paragraph undergoes similar treatment. From want of knowing a good system, many children never succeed in committing easily to memory what they are required to learn.

The teacher may greatly strengthen the pupils' memory by shewing them how to arrange their ideas in some kind of sequence. The subject is too large to enter upon here, but we will give one brief illustration of what we mean. Most teachers have found that children in learning poetry have a tendency to lose their way, to transpose the verses, or omit some altogether. "I can't remember what comes next," the poor child says; and no wonder, for, having learned to connect them by rote only, the slender thread is easily broken, and will not readily reunite. The case, however, will be entirely

altered if the teacher, after having thoroughly explained the subject and principal idea of the whole poem, gives the *leading thought* of each verse to be first committed to memory. Very little difficulty will then be experienced in placing the verses in their proper order. For instance:—Supposing the lines to be learnt are Longfellow's "Excelsior," the connecting links suggested might run somewhat thus:—

(1) The banner bearer, and his high purpose; (2) His description; (3) Temptations to ease; (4) The old man's warning; (5) The maiden; (6) The peasant; (7) The S. Bernard monks; (8) The faithful hound; (9) Death and victory.

The same method may be applied with advantage to learning long pieces of prose. A list in brief terms should be made of the subjects of the various paragraphs, and then learnt as a guide to saying the whole.

Again, the principle of association may be turned to account by the learners forming, each one for himself, connecting links with any ordinary facts, places, or names—in short, a kind of *Memoria Technica*. In learning the position of the notes on the treble stave in music, pupils have long been taught to remember that the letters of the word "Face" stand for the notes in the spaces. This is a simple instance of a process which admits of occasional application, but which will depend for success on each one's tact and acuteness. Such expedients will not of course bear comparison with the more intelligent plan of summarising the main incidents or divisions, of the piece to be learnt. Still, whenever the teacher finds that the children have a peculiar difficulty in remembering dates, geographical lists, or any sequence of facts, she should endeavour to invent some such mechanical aid to memory, or encourage them to do so for themselves.

Benefit of Private Study.—One good reason for inducing children to study in private is—that it makes them industrious and self-dependent. The teacher who tries to do everything for her pupils, who saves them all effort, and

never trusts them to learn anything out of her sight, will wear *herself* out and do *them* an injury at one and the same time. It is a grave error not to insist upon the scholars taking their fair share of work. One purpose of education is to train the young to apply themselves to their duty, and resist such temptations to idleness as would interfere with it. But how can a child's character be thus strengthened, if he is never allowed to study alone, and all is done for him at the teacher's expense? Even the memory work that has to be learnt in school, need not be repeated after the teacher. Far better is it to let the children learn silently, and thus cultivate a habit of independent thinking and working. It is good exercise for them, and gives their instructors a little breathing time. In the low standards of *poor* schools, where very little home-study can be done, it is well to devote the last half-hour to memory work, and then let the children leave as soon as they can say the appointed task.

Parrot-like Learning.—When a child studies the words privately, there is far more chance of his understanding their sense, than when they are simply repeated after the teacher, according to the plan so often pursued. We say there is *more* hope, but it is really only a question of degree. Children have an almost boundless capacity for stringing together not only sounds, but printed words, without attaching any meaning whatever to them. Grown-up people, in general, know so little of the working of children's minds, that they cannot believe that the latter are able to speak of a thing in correct phraseology, and even answer questions about it fluently, and all the time remain quite ignorant of what the thing itself is! Every now and then these good folks are startled to discover the jumble that exists in the minds of the very children whom they had considered prodigies of youthful talent.

It may be at some Sunday School Examination that their eyes are opened, when apparently intelligent boys and girls—being called upon to *write* the Lord's Prayer, or some portion

of the Church Catechism—begin the former, "Our Father chart in Heaven, hullobee my name;" and seem undecided in their minds as to whether "a pledge to assure (us thereof)' should be rendered—"a plough to a shore," or "a plague to a sewer."

Or the veil may be lifted during the ordinary day-school routine, when it transpires that a lad, who has worked weights-and-measure sums, with grand results, for two years and more, has not the faintest conception what is meant by a measure—perhaps suggests that it is "something to eat."

In a paper, published many years ago, on—"The Artificial Production of Stupidity," the author cites the case of a boy who could repeat with fluency the names of "all the capitals in the world;" but being suddenly asked, "What is a capital?' replied, "A beast." Numerous similar instances might be quoted, all tending to prove the absolute necessity of probing a child's mind before he is allowed to commit anything to memory.

There is a terrible waste of intelligence going on around us; and all teachers are called on to do their utmost to let light into the minds of those under their charge—never taking it for granted that a child understands *anything* till there is undoubted testimony to the fact.

Home-lessons and Parents.—A good system of home-study recommends a school greatly in the eyes of parents. They may murmur occasionally at the inconvenience caused them personally by the time required for preparation, but they secretly entertain a high opinion of the school and its management. Often they are willing to help their children with the lessons, and will watch their progress with keen interest. Nevertheless, if any parent enters a formal protest against the giving of home-lessons to his child, they must not be enforced in a Government school. The teacher should, however, point out that such a pupil will be at a disadvantage as compared with the rest of the class. It need hardly be said that

the tasks assigned should not be such as would interfere with home duties, and with healthful recreation.

Subjects for Home Lessons.—The subjects best adapted for children's private study are—the committing to memory of spelling, poetry, and tables; the learning of such text-books on geography, history, and grammar, as the school-lessons are based upon; composition exercises; hunting up information on any given topic; practice in recapitulatory arithmetic; writing out summaries of object lessons, and so forth.

Our readers may accept it as a general axiom that they should devote as much attention to the planning-out, explanation, and examination of their scholars' private study as is possible. Most assuredly it will be time well spent.

Let the elder children have something to do beyond merely learning by heart—some problem to solve, or information to seek out or composition to write—something that requires thought, discovery, and arrangement. And let there be connection between the lessons. Children who are old enough to comprehend, should have the satisfaction of feeling that they are working upon a plan, and, to a certain extent, should know what is coming. No lesson should be viewed apart from the series to which it belongs. There ought to be a *scheme* for each class, which can be divided up into weeks, due attention being given to each subject.

The setting of home-lessons is generally better done in the morning, to provide against possible absences in the afternoon. If fifteen or twenty minutes be devoted to the thorough and systematic explanation of the subjects for home-study, it will not be time wasted.

Examination and Correcting of Work Done at Home.—It is of little use to supply children with work to be done alone, unless that work is carefully examined. This does not mean that each child must have his lessons heard

individually, though the nearer a teacher approaches to individual examination the more satisfactory will her system prove.

Even in a standard of moderate size, there will be children of such varied attainments that it will probably be found best to divide them into two sections, one of which a pupil teacher may take, while the mistress examines the other—some of the more advanced children being also pressed into the service. Sums are easily marked with the aid of a book of answers. Spelling, tables, and catechetical instruction can be taken collectively. In schools where there are large upper standards and many composition exercises, and science or French papers to supervise, it is sometimes necessary to engage someone to attend principally to this work

CHAPTER VII.

Reading.

NO one will deny the great value and importance of reading. It opens the door to human knowledge, and to the thoughts of the best and wisest men that have ever lived. Children who learn early to read with pleasure to themselves, possess an immense advantage over those who are still engaged in mastering technical difficulties, when ten or eleven years of age. The former will make rapid progress, and be readily interested in a variety of subjects from which the latter will be, of necessity, debarred.

Difficulty of Reading.—Learning to read English is an undertaking which involves some tough work. Yet its peculiar difficulty is never taken into account by a certain class of theorists who write volumes on the subject of education, while, in the whole course of their lives, they have never tried to teach even one little child! They quite overlook the fact that our language literally *bristles* with inconsistencies, and may be said to be made up of irregularities. If the writers referred to, would count up the number of English words, which, though sounded alike, are spelt quite differently, they would cease comparing our children with those on the Continent, and wondering why it is they cannot read fluently at as early an age as little Germans or Italians.

Not a Satisfactory Subject.—Many educationists regard reading as the least satisfactory of the fundamental subjects taught in our Elementary Schools. In the "Blue-book" issued annually by authority, H.M. Inspectors report,

as highly unsatisfactory, the reading in the several standards, but seem to be unable to suggest a remedy :—

> "I have still only the old tale to tell about reading," writes one. "It is perhaps more fluent, but as far as I can see—as unintelligent as ever." And another—"I have only to reiterate what I have said on previous occasions respecting the very small amount of good reading that one meets with."

Complaints are in fact very general, that reading continues to be indistinct, monotonous, and "droning," and, above all, totally devoid of any *intelligent* appreciation of the sense :—

> "I believe," writes Mr. Salt of Huddersfield, "that in the method of teaching reading, there is a possibility of the greatest and most important advance in the intellectual training of children. The greatest difficulty that besets the teaching of this subject is that the English read may be to the children a dead language."

All teachers will endorse this last sentiment, for they are well aware that it is quite possible for children to study printed matter for years, precisely as if the words were written in Latin; that is, without discovering that the language of their books is identical with the language they ordinarily speak.

Accordingly, in considering the commonest faults met with in reading-classes (as we propose now to do), we will endeavour to give prominence to that *want of intelligence* which is such a hindrance to true Education :—

Indistinct Utterance.—This may be owing to defective articulation, to mis-use of the vocal organs, to sheer carelessness, or to a wrong pitch of the voice.

Children who have not learned to pronounce correctly the various vowel and consonant sounds, must be drilled by the teacher to use aright the lips, tongue, and teeth in forming the letters and words. Scholars who have a decided lisp or stammer should, if possible, be taught apart.

Those who have fallen into careless habits—such as, neglecting the terminations, leaving out the final g, or

slurring the words themselves, must have abundant practice with single words, each of which should be pronounced in a crisp, *staccato* manner, and with especial regard to the consonants.

The omission of the aspirate is a very general fault. Children addicted to it should be required to take a quick respiration before a word beginning with h; this will enable them to give the correct sound. Still, they must not be allowed to make the ugly gasp which is not unknown in our primary schools.

Wrong Pitch.—A vast amount of fairly good reading is often condemned, simply because it cannot be heard. The low mumbling tone in which some children read must be very trying to those who have to judge of their proficiency, and teachers should take pains to train them to read so that they can be clearly heard by the whole class. They should begin each paragraph in a voice pitched fairly high, and must be stopped, again and again, when they begin to mutter.

In correcting this irritating defect, it is sometimes found of service to make a scholar run up the scale to *fa*, and then begin to speak on that note, with the mouth well opened.

Hesitation.—The source of this fault is not far to seek. It results from the children's ignorance of the words, and ought to have entirely disappeared before they leave the third standard. The steady extension of their vocabulary, by a persevering use of well-chosen lists of words, is the remedy here. The children thus become rapidly familiar with every term they are likely to meet with, and so learn to read in a fluent and agreeable manner. Constant practice in words already known, and the continual acquisition of new ones, is undoubtedly the best method of overcoming the *mechanical* difficulty of reading; this *must* last as long as the words themselves continue to give the children trouble, and oblige them to be constantly thinking how they can so pronounce them as to escape blame.

Monotonous Reading.—A tame monotony, a droning, drawling style can only be removed by cultivating the intelligence of young readers, and leading them to comprehend the meaning of the words they utter. Though so common a fault, it is a most *unnatural* one, as we shall proceed to shew:—

To begin with, is it not true that we are all apt to forget that the art of reading is but the crowning point of much that the child has previously learnt? Has he not already acquired the difficult power of speech; and so acquired it, that there is really little left to desire in his accent and expression, or the modulations of his voice? And would it not be an absurdity to suppose that, when the time comes for him to learn to read from printed signs, he requires to be trained in some new way of speaking? Yet, unfortunately, this is what is too often attempted. Any truth and beauty of utterance which the child possesses are ignored, and a new and painfully ugly manner of speech is laboriously substituted. The long preparation he has undergone, and the power of expression he has gained, count for nothing; all is changed for the monotonous, artificial, almost agonising pronunciation to be heard in so many schoolrooms.

Remedy for a Monotonous Style.—The above remarks furnish us with the key to expressive reading. The rule that *a child ought to read much as he speaks*, must be steadily kept in view; and his instructor must realise that teaching him to read, means simply teaching him to pronounce printed words, precisely as he has hitherto given utterance to his thoughts by means of spoken words.

Reading with Intelligence.—It is obvious that if reading is to be expressive, it must be intelligent. Unless children take in the sense of what they read, how can they have any beauty of intonation? *The sound should convey the sense.* It is, then, of the utmost importance that the

meaning should be grasped; nor can children be cured of their dull, wearisome monotone till this is the case.

Do Children Comprehend?—The question naturally arises—How far do children comprehend the sense of the printed words they repeat? Experience seems to prove that the younger children, in elementary schools, seldom so much as realise that they are *intended* to understand what they read. To the ordinary child of seven or eight, the reading-lesson appears to be merely the deciphering of a succession of hieroglyphics, to which he is expected to give the correct sound.

Our first duty, then, is to impress upon young scholars *the reason* of their learning to read. They must be told, in plain terms, that the object of reading is to gain ideas—to increase their stock of information; that the book should speak to them—somewhat as the human voice does—telling something unknown to them before, and that if they gain *no* thoughts or ideas, they miss the primary end and object of reading.

It is, doubtless, difficult at first to get a child to understand what these (to him) cabalistic signs stand for; but it must be done, if we are to have a well-grounded hope that we are *educating* those who are entrusted to us.

An attempt to grapple with the difficulty.—The Society which issues this book has recently made an attempt to facilitate the teaching of intelligent as well as fluent reading. The mode adopted is to arrange words in certain groups, in such a way as to offer the *minimum* of difficulty to the learner. The words, after careful classification, are printed on sheets, in bold type which can be seen by a class of fifty or sixty children at the same moment. These printed lists, or *schedules* as they are called, are of two kinds; they consist of:—

(1) Words classified according to their signification.

(2) Words arranged in alphabetical sequence.

(*a*) **Classified Lists.**—Of course, the *classified* schedules are the most valuable, as they are addressed to the mind of the child, and designed to develop his intelligence. In them he finds words placed together that have some affinity to each other—as naval terms, military terms, geographical and commercial terms.

A strange word is introduced to the child's notice, but it is in company with others to which it has a family likeness; and (if practicable) a picture or representation of what the word stands for, is likewise shewn. Accordingly, the new word remains no longer a strange and mystic sign. It at once becomes an acquaintance; and—ere the lesson has been three or four times repeated—it has turned into a friend. Let us take as an example the word "Sentry." To a child of eight or nine who met with it casually, it would appear a mere assemblage of printed signs; but, learned from a classified list in connection with other military terms—and made vivid and lifelike by the help of a good illustration—the combination of letters "S-e-n-t-r-y" will ever after call up before the mind of that child the vision of a lonely soldier pacing to and fro—keeping watch, perhaps through the dark silent night, while others sleep. By this expedient, children are given those true impressions which remain indelibly graven on the mind.

Words that have an abstract signification are so arranged that a child can hardly help catching some idea of their meaning, from the combination in which he finds them.

(*b*) **Alphabetical Lists.**—Were our language like any other European tongue, alphabetically-arranged lists of words would be unnecessary and undesirable; but, as we have said before, the difficulties of English to a child are *innumerable*, and, therefore, it is true wisdom to let him encounter them one or two at a time. Quite young children readily gain fluency by the system we advise, while with older scholars the Schedules facilitate word-building. From the manner of their arrange-

ment, it is often exceedingly easy to perceive how adjectives and adverbs, nouns or verbs, are built up from some root-word.

Zealous teachers may prepare such lists of words for themselves. Those who have not tried the plan here recommended, can have no idea how quickly children may thus be taught to read with *ease*, *expression*, and *intelligence*. It may be objected that the system will be found rather hard and dry by the younger scholars. Experience has, however, proved that this is far from being the case. If given with spirit and energy, the lesson is one of the favourites, and the easier reading-sheets are regarded quite as friends by the little folks.

How to use the Classified Lists for a Spelling Lesson.—The children being so placed that all can see the large sheet (it is better to bring the class out for this exercise), the teacher pronounces the first word in a distinct, clear tone; the children repeat it after her, and then spell the word simultaneously two or three times, pronouncing the whole word after each time of spelling it. The next word is then taken in the same manner. When the sheet has been gone through, the children may be allowed to read it again (without stopping to spell), either singly or simultaneously, and as briskly as they can. Pointing is only necessary in the lower classes; it is best for the scholars to learn to keep the place by the eye, each child holding himself in readiness to pick up instantly the word that falls to him.

When the words can be pronounced and spelt with a fair amount of accuracy, the teacher should exert her utmost ingenuity to bring the ideas they represent clearly and forcibly before the scholars. It is here especially that a good teacher will shine. By illustration and description, by comparison, and by constant questioning, she will fix in the pupils' minds the correct thought which should be associated

with the word. Thus she will enlarge their vocabulary and widen their intelligence, day by day, in a way delightful to themselves, and therefore eminently fitted to arouse a love of knowledge and a desire for self-improvement. Each subject should be gone through, with copious explanations, more than once, and then recapitulated from time to time lest it slip from the child's treacherous memory. The mechanical labour of spelling and pronunciation may be much lightened, by making the children learn small-print lists of classified words at home.

It is indispensable to success that any such Schedules should be used *daily* and *systematically*, and somewhat in the way described above. But, to ingenious and skilful teachers, other modes will, no doubt, suggest themselves. Let them more particularly remember, that they must always give the correct pronunciation before the child is allowed to read or spell a word. "First pronounce, then spell," must be the rule.*

General Suggestions for securing Good Reading.

Having now noticed the principal faults which children are apt to make, and pointed out that a cure is to be found in giving them a more comprehensive grasp of the subject, we will go on to offer a few additional hints—attention to which will promote good reading in all the standards:—

(1) **Emphasis.**—Emphasis is the prominence given to certain words. Do not be afraid to let a strong emphasis be placed on some words, provided that the sense sanctions it. It makes the meaning clear, and gives vigour and variety to the reading. We all use far more emphasis in conversation than

*N.B.—The Alphabetical Lists being intended to drill the children in pronunciation and spelling only, no explanation of the words should, as a rule, be attempted. It is all but useless to try to give the signification of isolated words and terms; and even if the endeavour be successful, little is done by this means to cultivate the child's understanding.

we are aware of, and its absence renders reading very tame and dull.

Where is the stress to be laid ?—If the child can be trained to receive ideas through the printed words, he will instinctively put the emphasis in the right place. Still, with younger children, it is sometimes a help to tell them to lay stress, usually, on the nouns and verbs, and to pass quickly over smaller words. Of course, however, there are numerous exceptions to this rule. When the same word is repeated, it should also be accentuated; as—Help! *Help!* HELP!

It is allowable, at first, to give a few similar hints to the pupils, although it cannot be reckoned as the highest teaching; for all expression ought to be the natural outcome of the child's appreciation of the sense of what he reads.

(2) **Ascertain that the Printed Words are conveying Ideas to the Children's Minds.**—To make sure of this, often tell them to close books and give you, in their own words, a summary of what they have been reading. Question little children briskly after the following fashion:—

> The passage being—"Three little boys were in a boat, and as they did not know how to row, the tide carried them out to sea." Question somewhat as follows:—Where were the boys? How many were there? Why were they carried out to sea? What carried them out?

(3) **Cultivate the proper Inflexion.**—Inflexion means the rise and fall of the voice. The more children learn to read as they speak, the more correct and appropriate will be their modulation. It is a help to right inflexion if the scholars are made to begin every sentence in a well-pitched and distinct tone. This also guards against the common trick of mumbling the opening words. The voice must be raised before a note of interrogation if the answer is to be "Yes" or "No"; also slightly in reading a quotation. It should be lowered at a full stop, and in parenthetical sentences.

(4) **Attend to Pauses.**—Teach the younger children to mind their stops, and the elder ones, in addition to this, to make rhetorical pauses in the right places. This is essential to expressive reading. It also enables the reader to take breath, and to glance onward, so that his eye may be in advance of his voice.

(5) **Take Care that your Pupils Read at a Steady, Uniform Rate.**—No sooner do children overcome the mechanical difficulties of learning to read, than their tendency is to read too fast. Those who begin by drawling end by gabbling, unless care is exercised to make them observe a moderate pace. Without altogether endorsing the old adage, which runs:—

> "Learn to read slowly, and all other graces
> Will quickly follow in their proper places"—

we must own that, to race over reading totally deprives it of all beauty and melody.

(N.B.—The subject of *expression*, including emphasis, pitch of voice, pause, and inflexion, will be found more fully treated of under the head of Elocution.)

(6) **Never allow Children to Point to the Words in a Sentence.**—Even in the "Infant" classes children must be trained to keep their place without the use of a pointer; otherwise they will acquire a sing-song drawl from the first. Teach them to say—"The *cat* saw a *rat;*" not "The-cat-saw-a-rat." The jerking howl of so many first-standard children is, in a great degree, caused by the custom of pointing; for this encourages the habit of bringing out the words one by one, instead of reading them in clauses.

(7) **Prepare for the Reading Lesson.**—The teacher should not, as a rule, *plunge* into a reading lesson, but have a little talk about it first. If it is a chapter of some work

which the class is reading consecutively, questions should be asked on what has gone before, and it should be ascertained that the children know something of what they are going to read about. If the lesson is from an ordinary class-reader, they may be told a little about the subject.

(8) **The Management of the Breath.**—Instruct the children to take a deep breath before beginning a passage, so as to start with a good supply. They should be trained never to draw breath in the middle of a clause, but always at a full stop, semi-colon, comma or rhetorical pause—if necessary.

(9) **Never let Children Read Carelessly.**—If they do not know a word, let them neither guess at it nor spell it, but instruct them to pronounce the first syllable as well as they can, and then go on quickly to the next. Unless trained to act thus, children will stop at every long word and remain staring at it in a hopeless sort of way, instead of taking it syllable by syllable. Take care that children do not omit or mis-call the small words in a sentence.

(10) **Attend to the Position of the Class.**—If the children stand as is generally considered best, the feet should be either in the first position, or—as some authorities recommend—the right foot planted on the floor a little in advance of the left; probably this gives a firmer balance. The shoulders should be thrown back, the head kept well up. The book must be held upon the left hand—the right hand by the side, ready to turn over the pages.

(11) **Let your own Position be Appropriate.**—It is allowable for the teacher to *sit* during a reading lesson; but she should sit *on the alert* and not *at ease*. If she holds the book in her hand, she should look at it as little as possible. An experienced teacher dispenses with a book, and lets the children apprize her of verbal mistakes by holding up hands,

or she sets a monitor to do so. Meanwhile her own eyes are fixed on the class—not on the child reading, but on the whole class. She sees that one has lost his place, another is looking at the pictures in the book, a third is playing with something in his pocket. But soon—finding that nothing escapes their teacher's watchful eye—all become steadily attentive.

Class Reading-Books.

Under the present system of school inspection, the readers must be thoroughly known—a matter of no small difficulty both for the teacher and the taught.

In the second and third standards, the test-passage for writing is dictated from one of the readers, and some Inspectors still examine by means of the reading-books in all the standards.

How the Readers must be known.—To get up a reading-book thoroughly is a hard task, and yet cannot be considered as real education. Still, it must be done; the question is—*how ?*

The children must know the book in three ways :—

(1) They must know the words so as to read them fluently.

(2) They must know them so as to spell them correctly.

(3) They must know the sense so as to read with expression and intelligence.

Those who have been well exercised in the spelling-sheets, will find little difficulty in fulfilling the first two conditions. If any words should occur in the "readers" not to be found on the Schedules—such as geographical terms, historical names, etc. —the teacher should write them out, and make a sufficient number of copies, by means of a copying machine, for the use of the class. These should be learned at home by the pupils, as early in the year as possible ; and, until they can be both read and spelt with tolerable accuracy, the children should not be permitted to read the class-books.

Readers should not be too often read.—It will usually be found better to defer the study of the class reading-books, until within a few months of the examination. If the first part of the year is devoted to the diligent study of reading-sheets, varied by books of a miscellaneous description—every word and name of extra difficulty in the class-readers being learnt meanwhile—the children will do far better at the inspection. Their reading will be more fresh and life-like, than if (for twelve months) they have been nauseated with two or three books, till they hate the sight of them.

Besides, in Standard IV. and upwards, the children will have, probably, to encounter "unseen readers," and unless they are thoroughly exercised on some comprehensive system, they will be liable to failure.

The Class-books must be read with Intelligence.—This third condition is not so easily disposed of as the two preceding ones.

We have already dealt with the matter of expression; and have also given such advice as will lead to the meanings of *words* being intelligently and thoroughly known. This, however, is not all that is required. The children must likewise be able to give the meanings of *clauses and sentences*. If they have learnt what the words signify, a little practice will make them proficient in this. But they must have this practice, for otherwise, though they may know what is meant, they will be unable to express their meaning in plain, appropriate, and *simple* language – their own language, not dictionary terms, nor those sometimes printed at the beginning of the reading-lesson. They should be taught to give good answers in a pleasant manner—*i.e.*, brightly, and with clear intonation.

Especial pains must be taken that the children pronounce geographical terms right from the outset. They should not be allowed to *guess* at the pronunciation.

A Reading Lesson.—A lesson from a class-reader may be given in the second standard as follows:—

The lesson is prefaced by a few words about the subject, and some lively questioning addressed principally to the lazy, inattentive scholars.

The teacher may then read the first paragraph slowly and carefully—but with spirit, and as naturally as possible. She next ascertains if the children understand what has been read—whether *the thought is in their minds.* If not, the passage must be put into simpler words, till there is a well-grounded hope that their intelligence has been reached.

The children next repeat the passage simultaneously—and several times if necessary, especially any hard phrase—until they manage to read it much as they would speak it.

The same paragraph may now be read individually by a few of the children—not in turn, but picked out here and there at the teacher's discretion—all the rest holding themselves in readiness to take up the thread instantly. Very indifferent readers should not be permitted to try the patience of the class by individual reading. They may occasionally have encouragement by being allowed to repeat a few lines just read by one of the most advanced scholars; but are usually best taken alone afterwards. It is often advisable to make two or three pupils read together, instead of the whole class.

Lastly, more questions should be asked, in order that, by means of the children's answers, the full meaning of the passage may be brought out.

The next paragraph may be treated in the same manner, and so on to the end of the chapter, care being taken that the children do not linger, but press on rapidly and steadily.

As the examination approaches, much attention must be paid to individual reading. The teacher will do well, at odd moments (or during certain lessons) to call up children singly, and make each stand beside her to read a paragraph, chosen at random. The very fact of being asked by the Inspector to read out of his place in class, will often throw a nervous child off his balance.

The above is a simple and effectual way of preparing first

and second standard children for examination; but, as it is not likely to foster a love for literature, let it be observed that these low standards should be provided with interesting reading-cards and books, which they may be allowed to go through in a more natural manner—the teacher by simple explanations keeping up their interest throughout.

Reading in the Upper Standards.—In addition to regular, continual exercise in spelling, and in learning meanings of classified words—of which there can hardly be too much up to the sixth standard—and besides careful preparation in the readers, children should always have a set of extra books on hand, which they may be permitted to read at least once a week, in a manner likely to interest them. Books of natural history, travels, easy histories and biographies, and similar works, are to be greatly recommended.

The teacher must labour continually to improve the mode of reading—intonation, accuracy, etc.—and should require what is read to be reproduced in some form or other.

Sometimes the elder children have a tendency to slur over and mis-call very easy words. This fault must be corrected, and no carelessness of any kind overlooked. Poetry of a narrative and descriptive kind ought to be often read; since nothing so improves the style and taste, as constant practice in reading or reciting verse. Great care is, nevertheless, needed, lest the jingling of the rhymes tend to produce in young readers a sing-song intonation; and this branch of "elocution" should not be entrusted to an inexperienced teacher. All the poetry in the school readers should be taught and explained with great care; *not learned by heart*, but read with feeling and expression, and every passage understood; something should also be known about the author of the poem. Historical and geographical allusions must likewise be thoroughly dealt with.

In reading poetry, children are not to be allowed to drop the voice at the end of a line, unless there is a full-stop. The voice

must be sustained; although a slight—almost imperceptible—pause must be made at the end of each line to mark the metre.

Class Libraries.—To encourage a taste for good reading, there should be, in each class, a few well-chosen books—to lend. This often answers better than having a general library for the whole school. Of course, classes can interchange books at the end of every three or six months. The books should be selected with a view to combine instruction with recreation, and consist of such works as would be likely to attract the young. Records of travel and adventure, or gallant deeds, biography, science, and historical tales, are all appropriate. Caution must be used in lending books to girls of a very poor class, lest they neglect home-duties. The same objection does not hold good with boys, but loan-books should generally be withheld from all scholars whose home-lessons are not properly prepared. The library books might, with great advantage, be changed on *Friday* afternoons, as this would probably have the effect of improving the generally uncertain attendance on that day.

CHAPTER VIII.

Spelling.

WHAT teacher does not sigh as she thinks of this branch of an English education—presenting, as it does, such well-nigh insurmountable difficulties to the young scholars of the nation—difficulties which confront them on the very threshold of the temple of learning?

The Difficulties of English Spelling.—The pronunciation of the English language has neither rules nor principles; nor has its orthography any. Both are full of absurdities and inconsistencies. It has been well said by Max Müller:—"English spelling is a national misfortune. Everything English children are expected to learn concerning spelling, is irrational. One rule contradicts the other, and each statement has to be accepted simply on authority, and with a complete disregard of all those rational instincts which lie dormant in a child, and which ought to be awakened by every kind of healthy exercise." Again, a competent authority on education, Sir C. E. Trevelyan, has asserted, "The English system of spelling (it cannot be called *orthography*) is a labyrinth, a chaos, an absurdity." These heavy indictments against our mother-tongue are, alas! too true, and the consequences are—much waste of time in school, a heavy drain on the energy and patience of teachers, and a serious drawback to the advance in after-life of many otherwise well-informed young people of both sexes.

Grammarians have ascertained that there are twenty-six letters in our language to do the work of—and represent to the

eye—forty-five sounds; also that six of the vowel sounds are written in seventy-five different ways. Then, again, the names of our letters are scarcely any help to the spelling of a word. How should such a combination of elements as—

o, yu, jee, aitch, tee, represent *ought*,
ee, wy, ee, ess, ,, *eyes*,
tee, aitch, eye, jee, aitch, ess, ,, *thighs?*

These general statements are sufficient to show that our alphabet, as at present constituted, is inconsistent, deficient and erroneous.

But, in addition to such a faulty alphabet, there are other vagaries to be met with in syllables and words, which much increase the difficulty of teaching correct spelling. Compare such words as fulfil fulfilled, referred differed, hotter neater, moving, penned weaned, peaceable lovable—with full and fill, refer, differ, hot, neat, move, pen, wean, peace, love. Then again, there are words like proceed and precede; relieve receive and bereave, and numerous others which experienced teachers can quote as being the cause of endless trouble to a large proportion of their scholars. What can be said of such groups of contradictions as plough, chough, cough, thorough, through, rough, dough, hough, though, lough and bough, when put severally side by side with now, puff, scoff, burrow, threw, stuff, go, muff, low, lock, and bow? Pages full of similar anomalies might be given, but those which have been mentioned go to prove that even to us "Who are to the manner born," the orthography of the English language is so irregular and complicated, that most instructors will agree with Professor Meiklejohn, when he declares that "It is more difficult to teach spelling, than it is to drive a herd of young pigs to market along an unfenced road, and without the aid of a dog."

The actual state of the case is that the child has *to make a separate study of each word.* He must give his whole attention to it, and cherish no delusive hope that the spelling of another word will be of any help to him. To use his reason

or intelligence in spelling—to argue that *because* a certain word follows a certain notation, *therefore* another must be rendered in a similar manner, would be fatal to success.

No Royal Road to Spelling.—Some theorists propose that no attention should be paid to the formal teaching of spelling until the child has learnt to read with fluency, and can copy from print easily and correctly. They assert that when his eyes have thus become accustomed to the forms of the words, he will not experience much difficulty in spelling them. This is termed a natural and rational mode of "learning to spell." Other authorities in the educational world, recommend the committing to memory of a number of rules for forming terminations, and for word-building.

These, and other similar systems may "look well on paper," but when teachers try to put them in practice, they find themselves baffled at every step, and driven to the conclusion that—The royal road to correct spelling has yet to be discovered.

Stern experience proves, that not ten per cent. of the children in a class learn to spell by diligent and extensive reading. They simply do not *notice* the orthography of the words sufficiently to reproduce them rightly in manuscript. The Professor we quote from above, cites the case of a youth (one of the ablest boys he ever taught) who, at eighteen, spelt *door*—d-o-r-e; yet "he was an omniverous and steady reader, and more given to literature than ninety-nine boys out of every hundred."

Then, with regard to the *rules* on which some pin their faith—they are far too intricate for little children. Moreover, there are not really more than half-a-dozen which are of the slightest service. The usefulness of the remainder is neutralised by a multitude of *exceptions* to the rule given; for to remember these exceptions is actually a greater strain on the memory than would be involved by learning the entire list of words to which the rule refers.

Good Spelling Indispensable. — Teachers cannot afford to pay much attention to those who deprecate the time and labour expended in teaching children to spell, and who advise that studies of more importance should be substituted. All are agreed about the "pity of it," yet, until some phonetic system is universally adopted, there would seem to be no remedy. For, although to spell correctly is not reckoned any extraordinary attainment, yet to spell wrongly is considered a disgrace. Consequently, spelling cannot be made of too much importance, especially when we know what is likely to be the fate of a child who is weak in this department of rudimentary education. In all probability, he will fail at examinations, be ridiculed through life, and remain entirely ineligible for any post of honour. Plainly, then, every child committed to our care must be taught to spell, and to spell well. How shall this be achieved?

Well!—leaving theories out of the question—we believe that all who have to *teach* spelling will agree that no method can be successful which does not involve hard and unremitting work, extending over months if not years. In this subject—more than any other with which children have to grapple—the axiom holds good that "We learn to do a thing *by* doing it; by doing it repeatedly; by doing it right every time; by doing it until it is well done." Yes, truly; a child learns to spell by spelling; he learns chiefly by the eye, but also *by the ear*, though this last fact is strenuously contested by some writers.

A New System of Teaching to Spell.—It was a conviction of the utter insufficiency of the ordinary spelling-books to meet the exigencies of the case, which induced the Education Union to prepare the new system of Teaching to Spell described in the chapter on reading.

And further, it was felt that some more comprehensive method of teaching orthography was rendered imperative by recent changes in the mode of examination. To pick out the

hard words from the readers, and teach them indefatigably, might suffice to the perfunctory teacher of the past; but now that children of ten or eleven are liable to be tripped up by "unseen readers and passages for dictation," the case is altered. Whatever may be asserted to the contrary, it is an actual fact that these children are expected to know how to spell accurately, at least, three thousand words.

This truly sounds very like an "excessive requirement," but—as in the case of the abstruse calculations in arithmetic demanded of our youthful scholars—it behoves teachers to make the best of existing circumstances, and to face the trouble boldly.

By the diligent and *persistent* use of sheets of classified words, any child of average ability may be helped to surmount the multitude of difficulties which beset our English pronunciation and orthography, and receive those correct first impressions which are not likely to be forgotten. But before this desirable result can be attained, that list must be gone through again and again—the words repeated day after day till perfectly known—learned with explanation and illustration, woven into sentences, and written by way of transcription and dictation.

One kind of recapitulation is especially necessary. This is, the exercising of elder children in the shorter words printed for the use of Standards I. and II. An Inspector calls attention, in a recent Blue-book, to the fact that children frequently fail to pass in dictation, when a comparatively easy passage from the reader is chosen; and he thus accounts for the apparent anomaly:—

> "It is often forgotten that the irregularities of English words are chiefly in the monosyllables and dissyllables learnt in the lower standards."

Care must accordingly be taken that children, while learning to spell "Hippopotamus," do not forget the letters required to form such words as—"Dough," "plough," or "taught."

Great Patience and Diligence Needed.—The method of using the Spelling Schedules, referred to above, has been set forth in the chapter on reading, and so need not be repeated here. But let it not be supposed that this, or any other known process, supplies a "short cut" to good spelling. If such a bye-way exists, the writer of this volume would be glad to be informed of it! As things now are, the essential condition of success is the teacher's unflagging energy.

Too much Attention must not be Drawn to Incidental Mistakes.—If our readers will glance forward to our remarks on the subject of *Writing*, they will see that we condemn the plan of trying to teach spelling by means of dictation. This expedient is, indeed, worse than worthless; for, in numberless instances, it becomes the parent of error. In the same chapter we also assert, that—when a child has been thoroughly taught all the difficult words, before a passage is dictated, the teacher has a right to expect accuracy, and ought to express displeasure if the exercise is defaced with careless blunders.

Even then, however, she must feel for the child's difficulty, and take care not to discourage him. "Come, you have forgotten, we must rub this out and write it thus," is much better than holding the writer up to reprobation, as though he had been guilty of some moral delinquency in mis-spelling a word.

Nor is it wise to direct too much attention to a blunder; to make the child look at it, to quote rules, and so forth. All this tends to *fix the wrong mode of spelling* the word in the scholar's mind, whereas our aim should be to make him forget it, and have it replaced by the right mode as promptly as can be managed.

We will end these few words about "Spelling" (by the way —it must never be rendered "Spellings") by repeating our advice to teachers to attack the subject bravely—to make the children spell repeatedly, spell accurately, spell indefatigably;

to forestall difficulties, and allow no guess-work. Above all, let them remember there is no smooth, easy road to spelling, but that, if success is to be achieved in this subject, both teacher and learner will find themselves "condemned to hard labour."

CHAPTER IX.

Writing.

INTRODUCTION.—The parents of the children attending elementary schools form their opinion of the education given therein, chiefly by the proficiency attained in writing; it is, indeed, almost the only test it is in their power to apply.

This is one good reason for paying attention to the subject, but it is by no means the only one; for whether writing be regarded as a help to learning other subjects, or as a channel of friendly and business communication, or a means of preserving our own thoughts and those of others for future use, it is of the utmost importance that it should be learnt quickly and well. In order that this desirable result may be attained, writing must be taught on the best principles, and the early years of elementary school-life must be made the most of for the purpose.

In this subject, as in many others, modern taste has greatly changed what was once in vogue. That which not many years ago was thought the correct style in penmanship, is now discarded for its antipodes in character. We shall perceive this at once, if we compare the bold, round, firm hand-writing now advocated, with the small, angular, spider-like strokes of the formerly much-esteemed Italian mode.

But, no matter what style of caligraphy may be the favourite of the day, each writer falls into his own peculiar modification of that style, so that experts even pretend to read a person's character from the peculiarities of his hand-writing—whether that be running, cramped, round, pointed, or jerky.

Characteristics of Good Penmanship.—It hardly admits of dispute that good writing should be—(1) easy to read, (2) easy to trace or execute, and (3) pleasing to the eye.

If we compare good plain print, or some standard vertical writing, with a fairly good specimen of a sloping, angular hand, we shall arrive at the following conclusions:—

(1) That sloping letters are less legible than upright ones, and that there is a greater distance for the pen to travel in making them.

(2) That round letters are easier to read than angular. (Compare German script with English.)

(3) That plainly-made letters are better for the reader and easier for the writer than ornamental ones. (Compare old English with modern capitals.)

(4) That to be legible, words and letters must be properly spaced.

Hand-writing is made up of two sorts of lines—the straight strokes, which, when properly made, chiefly constitute its regularity; and the curved ones, upon which its beauty depends. These lines may be faulty in several ways. If they are all thin, the writing is said to be "scratchy"; if there is too much thickness, it is "heavy"; if the middle portions only of the down strokes are thick, the writing looks "patchy" or "blotchy."

Although in the early stages of writing, rapidity should not be the first object, but rather the proper formation of the letters, yet the ultimate aim should be so to teach the art that mind and hand shall act in unison, and speed be attained as soon as it safely may be.

From what has been said, it will be seen that the prime essentials of a good serviceable hand-writing are roundness, uprightness, simplicity of outline, uniformity in the size of the letters, proper joining of the same and adequate spacing. All words, too, should follow each other in straight lines across the paper. These requisites must constantly be kept in view, while the following hints and suggestions are carried out.

The Hand should be Formed Early.—When a boy's school-days are to last on till he has reached the age of seventeen or eighteen, it is not a matter of vital importance to his education that he should acquire a fluent hand-writing during his early years. But the question is altered in the case of children of the working-class—many of whom, under the present defective state of the law, leave school before entering the sixth standard. Until they have overcome the mechanical difficulties of forming letters—as well as the initial difficulties of spelling and pronouncing words—they can feel little pleasure in their studies. It is, however, unnecessary to dilate on the advisability of getting over this elementary work as early as possible in the child's career; for it must be obvious to all that, so long as he is backward in reading and writing, there is a serious bar to his advance in all other branches of learning.

Common-sense Instruction Required.—There is little doubt that children would learn to write with ease and comparative rapidity, far sooner than they do, if only a rational system were pursued in teaching them.

To begin with—there should be a uniform system of writing taught throughout the school. Why, for instance, should children form capitals differently in the infant school and in the upper departments, so that, having laboriously mastered the way to make certain letters, they are obliged as laboriously to *un*learn the method later on.

First Efforts should be Carefully Directed.—It is here that a reform is most needed. It is no exaggeration to say, that many little would-be scribes spend two or three years simply in acquiring bad habits which have to be uprooted afterwards. Who has not seen young writers of six, seven, and eight years of age, bending with all possible earnestness over greasy, badly-ruled slates, and with a blunt fragment of pencil—forming every letter wrong! This is a grievous spectacle to the true educationist, who knows that it

is just during these early years that the foundation of a good hand might be laid. How much time and trouble would teachers spare themselves and their charges, if they would jealously watch over such immature efforts, and guard against the acquisition of the bad habits which appear to come naturally to every child that takes pen or pencil in hand. Those who, by careful teaching, train the little ones to make every letter and word right from the beginning, will save themselves an infinity of trouble, and prove the truth of the saying that "An ounce of prevention is worth a pound of cure."

Different Methods for Teaching a Good Style of Writing.—The teacher must decide between the *analytic*, or that which proceeds from wholes to parts, and the *synthetic*, or that which proceeds from parts to wholes.

We are, of course, staunch advocates for ascertaining and putting into practice the readiest modes of teaching, not only writing, but all other subjects. It cannot be denied that methods which are not quite consonant with scientific principles, are frequently made, in the hands of an earnest and skilful teacher, to bring forth good results. Yet this does not exonerate the conscientious instructor of youth from the responsibility of striving to ascertain the *best* method of imparting, thoroughly and easily, the knowledge of any subject.

The analytic system of training children in the art of writing begins at once with words. It does so on the principle that *words* are the earliest elements that a child is conscious of. Some easy word, such as "cow," is chosen and written by the teacher on the black-board, while the children watch her movements and imitate them by tracing imaginary characters in the air. They are practised at this, until the teacher allows them the use of slate and pencil. She also calls them up in turn to the board, and lets them attempt writing the word thereon with chalk. When necessary, the hand of a child is held by the teacher and guided while forming the word. In

some foreign schools, small black-boards are affixed to the wall round the room, and the children work on these alternately with slates.

The words are not necessarily spelt while they are being written in this way; nor are the letters considered separately until a great many words have been practised. The advocates of this mode speak of it as being interesting and successful; but the great objection is that some hundreds of words must be written before the child acquires enough facility to trace with pen or pencil, and unassisted, any word that is put before him; for the letters, as such, must remain unknown to him for a long time. It is not denied that writing may be taught in this way, but, at the best, it is a cumbrous plan.

The Synthetic Mode.—The opposite system to this—the synthetic—is the old one which requires the children to be first well-drilled in making "pot-hooks and hangers." This method, as well as that of Mulhauser, has the fault of consuming much time, and of destroying the children's interest in their work by robbing it of nearly all claim to be considered a mental exercise.

Suggested Methods.

In making choice of a system for teaching writing, the medium course will be found the best. This begins with practice, under proper guidance, in forming—first letters, and afterwards groups of letters arranged in various stages, according to their degree of difficulty.

First Stage.—When the children have had sufficient practice in making letters in the air—using the forefinger, and following the motions of the teacher as she makes them—they may next go through a drill for learning to hold a lead pencil properly, so as to prepare them for writing on slates or paper. The copy-books, or copy-*sheets*, should contain traced

letters arranged in some well-graduated order. Here the instructions, given further on, as to position and holding the pen may be studied with profit. In this stage, lessons on the board should alternate with copy-tracing in the desks, until the small letters can be not only perfectly copied, but written from memory.

Second Stage.—To make the writing-lesson, as soon as possible, interesting, familiar words of two or three letters may now be written. The words selected should not, at first, contain letters requiring loops or long strokes. Lead pencil is still to be used for the traced copies. Both teachers and all who assist them must be extra vigilant at tracing lessons, taking care that the letters are properly begun, that each word is completed without lifting pencil from paper, and, above all, that the correct position is taken by the writer.

Third Stage.—At this point the capitals may be traced, and then copied on slates. As a preparation for transcription from print, let the teacher write out on the blackboard interesting sentences, for the children first to read and then to copy. They may also be trained to criticise each other's letters when made on the board, and compare them with those of the teacher in respect of shape, height, and width. The copies may now contain more difficult words, to be traced over first with a lead pencil and finally with pen and ink.

Throughout these stages, the teacher must be careful not to introduce too much fresh matter in the successive lessons, and not to fatigue young fingers by too long practice at a time. The board should be used unsparingly. No carelessness must be allowed with regard to position, pen-holding, or formation of letters. In fact, children belonging to the infant school and Standard I., should be so taught, that they will prove fairly proficient when promoted to the upper classes.

Traced Copies.—The use of copy-books, or copy-sheets, with letters and words printed in faint outline for the young

pupils to trace over, is a comparatively modern expedient. It has the recommendation of presenting the learner with but *one difficulty at a time*, and effects a speedy cure where faulty modes of writing have been brought by scholars from inferior schools.

This system has been popularised by a large continental teaching Order—celebrated throughout Europe for the penmanship of their pupils. The members of this wide-spread organisation attribute the success achieved in this branch of education, mainly to the very complete system of outline copies they have introduced into all their schools. Hence we read in their manual of teaching—"This plan (*i.e.*, of using traced copies) unites the advantages of all others, and has been universally adopted by us. It saves much time, and is exceedingly economical, though it may not seem so at first sight; but the fact is, that the child so quickly acquires a good handwriting by this method, that it costs far less in the end than any other."

How Used.—All persons may not be disposed to accept the testimony of this educational community, and will prefer to attain the same end by another route. But, if writing is to be well taught, there must be a *definite* scheme of some sort, and this scheme must be consistently carried out. To those who think well to adopt the plan of traced copies—thus smoothing the way for the little writers—we would say: "There is a right and a wrong way of using these outlines—as of doing most things."

To place a sheet of traced letters before a child, and tell him to "go on writing"—leaving him to puzzle out the intricacies alone, would be quite useless. The teacher's help is needed here as elsewhere.

Blackboard Illustration necessary.—Traced sheets must at first be used only in conjunction with blackboard teaching. Before the outlines are touched by the scholars,

teachers should write each letter, or combination of letters, large size on the board, bidding the children follow every movement attentively, and notice more particularly how letters are commenced, ended, and joined together, and how each word may be completed without lifting the pen or pencil. The class will not take in all their teacher says and does the first day; no, nor the second, nor the third; but as she continues week by week, and month by month, to practice before them for the first five minutes of the lesson, letting them afterwards grasp the pencil and try their own powers, they will almost insensibly acquire a good bold style of penmanship—one which will do credit to the whole school.

On the other hand, the indolent teacher, who grudges the trouble of demonstration, or thinks it "not worth while to have out the blackboard for five minutes' practice," will reap the consequence in a crop of bad habits that will cause her ten times the trouble to uproot, and aptly illustrate the saying that "The lazy man's load is the heaviest to bear."

It will not, however, be found sufficient to give the scholars a good start. The teacher and her helpers must pass in and out constantly amongst them, pencil in hand—correcting errors freely.

In the lower standards, there should be two short writing-lessons daily. In Standards III. and IV. there should be a lesson of half-an-hour or so every day; while children in the fifth and sixth standards should write copies two or three times a week.

A practical and economical method of using traced copies, is to set the younger children to work first with a hard pencil; then let them go over the outlines a second time with pen and ink; lastly, let them copy the whole on their slates; or, if they are above the first standard, on *slips of newspaper*.

Writing on Newspaper.—Stokes, in his "Manual on Rapid Writing," recommends this practice for adults; and it may be adopted by school-children with great benefit to their

penmanship. It is needless to dilate on the advantages of the plan; teachers who make use of it will soon discover them for themselves. The paper should be of good quality, such as that on which the "Times" "Telegraph," and "Standard" are printed, and the print must be regular—not consisting of advertisement sheets or very short paragraphs. The children should be directed to write over two, three, or more lines of letter-press, according to the size of the *Hand* their teacher wishes them to practice.

The sheets should be folded into a convenient size—not too small—and the children enjoined to write straight on, regardless of column lines or other divisions. They must be as careful to make letters touch the lines top and bottom as though the paper was ruled.

With a view to forming somewhat of a running hand in the upper standards, it is advisable to accustom children to write a succession of o's, m's, or u's, right across a sheet of newspaper, without letting the pen leave the paper.

Position.—A vast amount of vexation would teachers be spared, if they were to insist on their pupils taking the proper position from the first:—

The head should be held up; the feet planted steadily on the floor.

The whole of the left fore-arm should be laid on the desk, and the hand placed firmly on the slate or paper.

The middle of the right fore-arm should rest on the edge of the desk—the elbow being kept two or three inches from the side; the wrist ought not to touch the table, but the hand slide on the third and fourth finger.

(N.B.—With quite small children it is often necessary to let the wrist rest on the table.)

When the child begins a fresh line, he should be instructed to move the book or slate so much higher on the desk—*not* the right hand lower; copies, slates, and note-books must be kept straight on the desk, and well in front of the writer.

How to Hold the Pen.—The manner of holding the pen differs for *sloped* and *vertical* hand-writing. The latter having been adopted in most Government offices, will probably entirely supersede the old-fashioned style. It requires that the pen should slant well to the right, and the hand be so held that the wrist is turned to the side, instead of having its broad surface parallel to the table or desk, as was formerly thought correct. For sloped letters, the tip of the pen must be to the left and the hand turned in such a way that the outside only appears.

The pen must be held rather upright, between the thumb and forefinger, supported by the middle finger—the stem of the pen resting between the knuckle and joint of the first finger. Both nibs must be pressed lightly and evenly on the paper. The point should be fully an inch from the tip of the forefinger; for if the pen is held too near the point, it produces slow, cramped writing. Inked fingers are a sign of this fault, which is a very common one in second-rate schools.

The Position should be Taught by Drill.—To sit aright, to place the arms and hold the pen properly—is really a drill exercise, and, like all drill movements, should be executed with the greatest precision and accuracy. The object we aim at in writing is—that a perfectly even line shall be made, and that the pen shall travel with ease, precision, and rapidity over the paper. This result can only be attained by the teacher persevering in giving plenty of practice in the proper positions and movements, until the children find it difficult to write in any but the correct way. Pen or pencil drill should precede *each lesson* in the lower standards, and the same care should be exercised, as to posture and pencil-holding, in slate-work, as when pen and ink are used.

The following drill-exercise has been found to answer well:—

(1) Place slate or copy on the desk exactly in front of writer.

(2) *Sit upright*, with feet planted on floor (or support of desk), right foot more forward than left.

(3) *Left arm on desk*, with hand pressed firmly on the book or slate.

(4) *Take up pen;* holding it between thumb and middle finger (letting it rest chiefly on the latter), the forefinger laid lightly on the pen to steady and guide it.

(5) Dip pen in the ink.

(6) *Right arm in position;* wrist turned so that hand will slide on the third or the little finger; arm three or four inches from waist (for vertical hand-writing).

(7) Commence writing.

As often as the class relapse into a careless posture, so often must the teacher interrupt the writing and have the drill repeated, if it be six or eight times in the course of the same lesson; for the rules concerning position must be enforced. Nothing can be more subversive of discipline than for regulations to exist in theory only. It brings the teacher's office into contempt when she allows the children to ignore her orders, and to persist in writing with noses almost touching the paper, or with slates, books, and pens in any position but the right one.

Plenty of Pencil and Pen Practice.—As soon as the child is able to use pencil and pen with some degree of ease and freedom, and can readily form both small and capital letters from dictation, he should have plenty of practice with a view to gaining speed and facility. At the same time, neither slovenly writing nor careless attitudes must be tolerated. Children are naturally heedless, and if not watched, will have a smudge, a blot, or a word omitted or mis-spelt in every other line. The teacher must be *kindly* severe in exacting care and neatness. Instead, however, of scolding a child, it is better to say gravely—"This is not your best;" and then have the copy re-written—perhaps at the same time taking away a good mark or ticket.

The slovenliness of English children's writing, as compared with those in Continental schools, is very marked; but it is chiefly owing to the carelessness permitted by teachers in the lower standards; and often in the infant school.

Transcription.

This is a useful exercise when used in moderation and in its right place. Nevertheless, it is not too much to say, that a vast amount of the bad penmanship in English schools may be laid to the score of transcription. It is not uncommon to see little children who have had no systematic teaching in the art of writing, set to scribble from a printed book, and *mis*-forming almost every letter. They are making o's backwards, omitting capitals, because they are ignorant how to form them, and wholly disregarding such matters as spacing and punctuation. In some schools, this is considered a good way of keeping children quiet. Quiet they certainly are, and a casual looker-on might feel gratified at the absorbed attention of the little band. But the truth is, these imperfectly-taught children are not only doing no good, they are doing positive harm; learning to write badly, and gaining the pernicious habit of copying word after word—often letter by letter—mechanically; *i.e.*, without the least idea of the sense.

Transcription requires to be Carefully Taught.—If this exercise is not to *injure* education, it must never be attempted in Standards I. and II. except under the careful supervision of an experienced teacher. If the mistress must neglect one writing lesson, far better to allow the children to blunder alone over the traced copies, than to leave them to sow the seed of a harvest of errors by transcribing from print without help or guidance.

Hints for Teaching this Exercise.—Writing from print is really unsuited to little scholars of six and seven; but as this exercise now forms part of the examination of Standard I., they must obviously be allowed a fair amount of practice in it. By care and thoughtful training, the teacher may avert positive harm resulting.

To begin with, let no child transcribe a single word till he can write the whole alphabet accurately and easily; and has

also had some experience in connecting letters, spacing, and punctuating. This will have the good effect of relegating lessons in transcription to the last two or three months of the school year in Standard I.; and we can assure our readers that it is possible, by following this prudent plan, to ensure the writing on Inspection day being a model of symmetry.

As soon as Transcription may be safely allowed, let the children begin with single words taken from a spelling-sheet; and, at first, let the teacher herself transcribe each word on the board, before them. The class must then copy them; later on, they may be permitted to write them directly from print. When transcribing single words, they must be directed to write two only in each line, to commence each with a capital letter and end with a full stop, and to pronounce every word in a low tone or whisper, both before and after writing it. It may be asked—Why this last regulation? In order that the word may convey the thought it expresses, to the mind of the writer. Otherwise he will simply go on writing one letter after another without attaching any more meaning to the process, than he would if he were forming a succession of pothooks. Too much importance cannot be attached to the habit of accustoming children to read and write *intelligently* from the first.

Transcription of Sentences.—This can only be attempted with profit after special instruction has been given. The teacher must write sentences before the class, bidding them follow her every movement, note the use of capitals and stops, the distance between words and sentences, and *chiefly* the manner in which the words may (and may not) be divided at the end of a line. In short, she should—as recommended invariably throughout these pages—foresee every difficulty and provide against every mistake which her little charges might possibly make. Then, let her not forget *to read the whole sentence or passage over to her scholars*, both before and after writing it, and to make sure that they understand its drift.

Spacing.—This is always a difficulty to beginners. We can hardly expect them to measure with the eye; but, if recommended to use—as a measure—either the top of one finger or of their pencil, they will soon be trained to "space evenly," as the printers say. Irregularity in this respect will spoil the appearance of really good hand-writing; whereas regular spacing will make indifferent penmanship look well.

The teacher must use her own judgment as to when she may safely discontinue the blackboard teaching of transcription. Probably the longer she continues this daily preparation, the more satisfactory will be the result.

Class Readers not suited for Transcription.—A short anecdote or dialogue, poem or fable—complete in itself—is more suitable for transcription than passages from the class readers of which the children are already weary. It is also wasteful to use the latter for this purpose, since nothing wears them out more speedily. However, in Standards I. and II., where the children are examined from their readers, teachers generally think it *safer* that they should transcribe largely from them. All the same, it is doubtful whether they would not do as well or better on Inspection day, if allowed to copy more varied matter beforehand.

Cuttings from magazines for the young (such as "Little Folks" and "Chatterbox") are very good; and, if pasted on card, will last a long time. The children's recitation verses should likewise be transcribed, but *not* until they have been thoroughly explained.

Individual Correction not always possible.—It will not, of course, be found practicable to correct sixty or more slates after the lesson is over. Teachers should move continually among the children, making necessary corrections with a pencil—advising and criticising—also, at times, encouraging. One of their chief functions will be to find out whether the scholars are writing with brains as well as fingers.

That is, whether they are entering into the sense of what they write, or merely grouping a number of letters together, much as an intelligent ape might be trained to do.

When it is needful to correct transcription after the lesson, some of the elder scholars may relieve the teacher of part of the task.

Transcription in Upper Standards.—Poetry especially should be very carefully transcribed by older scholars. They must be taught to arrange the lines symmetrically, and to punctuate with accuracy. In higher grade schools, it is an excellent plan to let the elder girls make a collection of "Gems," both sacred and secular. Parents will usually pay for a nicely-bound book, and value it greatly when filled. Inspectors would probably willingly accept such an album in lieu of copy-books—though there is ample time for both, if time be economised. Of course, the sacred extracts must be written during the time set apart for religious instruction.

Transcription an Unintellectual Exercise.—Though we have devoted such space as seemed desirable to this subject, it must not be supposed that we consider this operation deserving of the name of *education*. It is a purely mechanical process that appeals but little to the child's intellect or to his powers of observation. An hour devoted to composition will do more towards cultivating the higher faculties of a scholar, than twenty hours spent in copying from print. The zealous teacher will always regard with a jealous eye the time devoted to the latter, and cut it as short as circumstances will allow.

Dictation.

The mistaken idea that spelling can be taught by means of dictation is responsible for much of that defective orthography which is frankly acknowledged to be a national defect.

Children have been expected to write words correctly which they have never before seen, or even heard of.

Moreover, as there are three or four wrong ways of spelling many English words, and but one right way, it cannot occasion surprise that irregular words are commonly spelt incorrectly when not previously known. And, although the offending word may afterwards be "written out" twenty-five, fifty, or even one hundred times, the first impression is too often the permanent one.

Now, however, people seem awaking to the truth—plain enough all along one would have thought—that dictation can only be *the test of what has already been learned.* Besides, all true educationists recognise the fact that one great aim of the teacher should be to remove stumbling-blocks out of the path of the young, and to take such wise precautions that blunders will be reduced to a *minimum.* This being so, we should use every effort to prevent a child ever *seeing* a word wrongly written. Dictated passages should contain no word which he does not know thoroughly—its meaning as well as its orthography. Then he may be justly blamed should he make mistakes, since they must arise from pure carelessness.

Dictation must be Used with Judgment.—It would be a decided benefit to education, if dictation tests could be banished from all the standards, and the child's ability gauged by the intelligent use he can make of words he has become familiar with, in simple composition. We have, however, to do the best we can under existing regulations, and to cut the educational coat according to the cloth allowed by the Department. Accordingly, even in Standard II., the children must be prepared to write correctly any passage in their readers, which the Inspector may chance to select.

Nevertheless, our advice is—let dictation be very sparingly used until the examination is drawing near. It should be regarded as the crowning point of previous labour; the reward of good work already done—the scholars being taught to con-

sider it somewhat of an honour to be permitted to "write from dictation."

Let every passage chosen for the purpose undergo searching scrutiny beforehand, and each word of even doubtful difficulty be written on the blackboard, and explained, before the lesson begins.

How to give the Lesson.—In giving out dictation the following points should be observed:—

The children must be trained to watch the teacher's lips while the words are dictated.

The whole of the passage should first be well and expressively read, and then repeated in clauses—once only.

It is important that a complete clause should be given out at once, not merely two or three words; and that the children look at the teacher and refrain from writing even a letter till all is given out. We read in a recently-issued Inspector's Report—

> "Failure in dictation at the Inspection often arises from want of care in instructing the children as to the proper method of taking it down. They have not been taught to listen to the words dictated. As soon as the first word has left the teacher's lips, down go the heads, and the children are busy writing it, while the succeeding words fall on almost unheeding ears."

The children must write as rapidly as they are able. The passage is generally dictated far too slowly. It is better to arrange the standard in two or three divisions, than to keep the quick children *marking time* (so to speak), while the slow ones painfully catch them up. The dullards should have less difficult passages, and not be pressed on so rapidly. A good teacher can easily dictate to two or three divisions at the same time. Children who are, from some cause, slower than the rest, should be instructed to leave a sentence unfinished, if necessary, and start each passage given out *with* the class. Such children must not be waited for, but instructed to draw a dash for every word which they have not been able to write in the time allowed. In the same way—when a child is doubtful how to spell a word—he should be told to draw a

line and leave it, not guess at the spelling. It is no small achievement to teach a child *to know when he doesn't know*—something!

Correction of Dictation.—The method adopted for correcting dictation (and there are many such methods) must be effective, and, at the same time, expeditious. It causes children to be careless when they think that their faults will escape detection; yet often the time and labour expended on the correcting of dictation might be spent to better purpose.

Conclusion of the Lesson.—Lastly, mis-spelt words having been written out aright, let the children read what they have written, either to themselves or simultaneously, and after the teacher has, by a few rapid questions, ascertained that they have thoroughly understood the tenour of the passage, the lesson may be concluded.

Dictation in High Standards.—The operation may be varied here by directing the children to write something different from what is actually dictated. For instance, the verbs given out in one tense may be written in another; or nouns dictated in the singular number may be required to be written in the plural. Thus, besides a spelling-test, the lesson may partake of the nature of a mental exercise.

Copy-books.

Copy-books for Exhibition at the Examination.—According to the present code regulations, each child must present a copy-book at the annual inspection. Most of H.M. Inspectors prefer books without head-lines, filled with specimens of the children's handwriting, copied from the black-board, or some good model. The copy-books of the two highest standards should be of good paper, and contain forms

for business letters, bills and invoices, with perhaps a little ornamental writing.

It is often well to allow the scholars to take home these copy-books after the examination. They are valued by the parents, who have very little opportunity of judging of the progress made by their children.

General use of Copy-books.—The occasional use of copy-books throughout the year, trains the pupils in habits of neatness and accuracy. In the form of note-books they may become of great practical value, if they contain a well-arranged summary of the year's course of study in geography, history and science, grammar and composition.

All copy-books must be kept scrupulously clean and tidy. No blots or creases must be overlooked; neither should they be rubbed at the edges, nor smudged with the fingers, nor should unused spaces be left. One line must be filled up before another is begun, and lines must not be skipped. It has been said, with a fair amount of truth, that the efficiency of a school may be assessed according to the condition of its copy-books.

The name of the child must be written on each copy-book, and the *date* at the head of each copy.

Slates.

Most of the practice in the lower standards will be upon slates. It is a mistake not to use them for certain purposes in the upper standards; for slate-practice encourages speed and freedom, and is of real service in helping to *form* the hand.

Slates should be strong, and of good quality; an occasional wash with hot soda-water will keep them free from grease.

Ruling.—Both slates and paper should be properly ruled —slates on one side only, the other being left free for sums.

The gigantic letters which at one time were considered the proper thing for tiny fingers to compass, are no longer taught in the best schools. The *widest* ruling-space need not exceed three-fifths of an inch. Half-an-inch is preferred by many for the first and second standards; one-third of an inch for Standard III., and a quarter of an inch for Standard IV. This, before the end of the school-year, should lead up to practice on single lines.

The *simpler* the ruling, both on slates and paper, the better. The fanciful and complicated styles which are constantly advertised may look well on paper, but only serve to confuse the children. If the latter are taught to loop their letters properly, and to make the loops of b f k l the same length, as also those of j g y z., they will not need a labyrinth of lines to guide them.

Handwriting often too large in Standard II.—It is a common thing to see Standard II. children labouring to write dictation and transcription in round hand. This is quite unnecessary. For such exercises, the lines need not be more than a third of an inch wide. If the children write round-hand copies regularly, there will be no fear of their writing becoming cramped.

Writing on Single Lines.—In Standard IV., writing on single lines must be practised, but supervision must be exercised, and care taken that the writing is kept straight, and that the letters are neither uneven, cramped, nor crowded.

No Time to Waste.—Perhaps there is no department of school-work in which so many precious moments are thrown away, as in writing. To one who knows how much has to be accomplished during the child's short school-life, it is sad to see half the members of a writing class, with pens held up—often for five minutes at a time—waiting for "teacher to come round" and look at the line just written. Let the

teacher provide against this loss, by arranging that *each scholar* shall be kept hard at work throughout.

It cannot be too often or too earnestly repeated, that "We all learn to do things by doing them," consequently children learn to write by writing, not by holding pens up in the air!

Concluding Advice.—In conclusion we would press upon all teachers the expediency of training their pupils to write quickly and carefully while in the second and third standards. It is quite possible to teach them to feel at home with pen and ink, and to write habitually *well*, before they leave Standard IV. We must remember that but little progress can be made with that important exercise—*Composition*—so long as children have "handwriting on the brain," and can only form letters slowly and painfully.

Again, it should not be forgotten that children require confidence as well as practice, and those who really try must be encouraged, no matter how imperfect their work may be. A good teacher imbues her pupils with her own faith that they can do whatever they earnestly attempt.

Our reiterated counsel to those who would see all their young scholars able to *talk* with pen and pencil is—

(*a*) Give plenty of short lessons in the lower standards.

(*b*) Make the children read every word they write.

(*c*) Allow no carelessness—no scribbling, blots, smudges, or badly-formed letters.

(*d*) Use the blackboard continually, and upon some system.

This last point is of extreme importance, as we may gather from the advice of not only the best teachers, but the unanimous opinion of our school inspectors. Says one:—

"I always find the best writing in those schools where the blackboard is invariably used."

And another:—

"For every writing-lesson there ought to be a blackboard, with two or three copies on it, before the class."

"Try to make the handwriting as *perfect* as possible throughout the school. Set a high standard before yourself and the children."

It is natural to us all to take pleasure in carrying anything to the point of excellence, and we often confer a positive favour upon our pupils by exciting in them the desire to excel. On the other hand, however, time and labour, which might be employed to better advantage, must not be lavished upon the production of copies which rival copper-plate in accuracy. The primary aim and object of the Elementary school teacher should be to enable boys and girls, of twelve or thirteen years of age, to write such a plain, distinct, and fluent hand, as will subsequently be of practical service to them.

CHAPTER X.

ARITHMETIC.

IT is much to be hoped that the Education Department will, ere long, see fit to lighten the present excessive requirements in the way of arithmetic. We are far from denying that this branch of study has great value, and no education would be worth much that excluded it. Still, the difficulty of the Code arithmetic for young children makes it a fearful strain both upon the teachers and learners; and, in order to fulfil the conditions upon which alone a grant can be secured, an amount of time and toil has to be devoted to this subject, which is out of all proportion to its importance.

However, while hoping that through the enlightened policy which now prevails at Whitehall, a much-needed reform may be carried out, it is our plain duty to make the best of existing circumstances, and especially to exercise every ingenious art to lighten the burden which must, for the present, be borne by the children of this country.

Arithmetic—the science and art of number—if taught properly and effectively, should train the reason, exercise the memory, foster care and accuracy, and prove of practical use in the ordinary concerns of life. Since it is, generally speaking, the only mathematical subject taught in Elementary schools, it should be made to contribute to that mental training which is so greatly promoted in higher schools by the superadded studies of Euclid and Algebra.

The burden may be lessened by Skilful Instruction.—The only way in which teachers can lessen the strain which arithmetic now imposes upon the immature brains of

the young, is by *first-rate teaching*. It may seem little that even the highest skill can effect, but let not that little be despised.

Failures in Arithmetic.—Inspectors attribute the unsatisfactory results obtained in so many schools to the way in which arithmetic is taught. They assert that there is little or no attempt to elucidate principles, that the use of the blackboard is largely neglected, and that mental exercises are not given sufficient prominence.

There are other reasons, which are not always taken into account. Frequently, too much is expected from the scholars. People are rather apt to gauge young minds by what they have themselves acquired through a long course of learning and experience. They forget, too, that many children are nervous, so that at the Annual Inspection—which they regard as an awful event—they sometimes lose that perfect composure which is necessary to enable them to attack arithmetical test-cards with success. This is one reason why teachers are often disappointed by the failure of children upon whose proficiency they had counted.

This not a Treatise on Number.—It is not the purpose of this little work to give full instructions in arithmetic. Only such directions and suggestions will be given as the writers believe may be new to some of the teachers who will use the book, or may help them to render instruction in this science less burdensome and wearying to the children under their care.

To begin with, the following hints, if carried out, will be found to save time and labour in the end :—

(1) **Every Stroke should tell.**—There is not an hour of the school-year to lose, if the poor children are to rise to the standard exacted of them. Too much pains cannot be expended in planning out the work of the forty-four weeks,

with thought and ability. Each week—each day—should have its appointed task. Not a single sum should be given without a purpose. Every stroke should tell. The sheets of examples published by the Education Union will be found of great service, as the head-mistress can thus put into her subordinates' hands precisely what she wishes them to use at the moment. But these will not in the least exonerate teachers from that incessant oral instruction and blackboard demonstration, on which success mainly depends.

(2) **Prepare your Lessons.**—It is an undoubted truth that the more carefully any lesson is prepared—so much the more skilfully will it be given, the more profitable and pleasant will it be to the hearers. The vague, hesitating manner in which some teachers explain the various rules or operations to their class, is chiefly caused by slothfulness in preparation.

(3) **Attack Certain Difficulties Early.**—Many exercises on number which puzzle and trouble children for years, might be made clear if brought to their notice earlier, and in their easiest form. Problems, fractions, aliquot parts, "measures," and "multiples" have a mysterious and alarming sound to young people, which is—to a great degree—unnecessary. They should be taught systematically and very simply, from the second standard upwards.

(4) **Teach the Tables thoroughly in the Lower Standards.**—Constant practice in the tables and mental exercises may be said to be *the* work of Standards I. and II., accompanied by just sufficient slate practice to enable the children to "pass" with credit.

The importance of attaining proficiency in the necessary *tables* at this early stage cannot be over-rated. They are the foundation of all accuracy and readiness in computation, and, consequently, should be learnt thoroughly and intelligently, and in advance of actual requirements. More than aught

else, will this lighten afterwork, and conduce to ultimate success. The Code requirements are not heavy in these two standards; nor do the children suffer from the monotonous drill of table-learning, as they might when older.

(5) **Importance of Mental Arithmetic.**—Difficulties may be *immeasurably* lessened by the steady daily use of mental arithmetic, carefully graded, and taught with earnestness and energy. Those who have not tried it, have little idea what a sound and solid foundation for future work is laid by this means, and what brilliant after-results may be confidently looked for.

(6) **Teach Children to Make Figures Quickly and Arrange their Work Neatly from the First.**—There is plenty of time in the infant school for children to learn to make figures quickly and carefully; they should be taught to form them from copies written in good bold style. In Standards I. and II. they must be shewn how to place sums properly upon the slate, to draw straight lines beneath them, to shew up the answer, to *state* problems intelligibly from the beginning, as well as to write £ s. d., and all other signs neatly and legibly. These details must be so taught that there shall be nothing to unlearn later on.

(7) **Anticipate the Work of the Standards.**—With the dread of the examination before them, many teachers are afraid to go at all beyond the bare requirements of the standard in which the child finds itself. This is altogether a mistake. Not only does the children's good demand that the chasms between the standards should be bridged over, so far as may be, but they will do far better in their special work if their range is widened. It is not, of course, recommended that they should be doing the work of the standard above that in which they are classed—for this would be to add to the over-pressure which undoubtedly exists—but it is wise to prepare

for the difficulties awaiting them on their next promotion, and thus make the rise more gradual.

(8) **Teach Principles.**—Principles, and not only mechanical work, must be taught from the commencement. The theory of arithmetic, without being made so prominent as to repel young minds, must yet be brought to bear upon each lesson. These must be well illustrated by concrete examples —*i.e.*, every number should, as a rule, be spoken of in connection with objects that are familiar to the scholars, either in their school or home-life.

(9) **Teach Short Methods.**—Opportunities should be seized in the upper standards of teaching brief methods of multiplying, dividing, etc.—but this should never be done without giving *the reason* of the process. Children often cover their paper with cumbrous calculations which might have been expressed by a few figures. A great deal of ingenuity and thought may be exercised by cancelling and other expedients. It is grievous waste of time to keep children long at a problem which they cannot solve; rather give them the help they need, and then set them an easier sum of the same kind—as a test.

The elder children should often be made to *prove* their work by doing the same sum by more than one rule; the younger ones should prove theirs by the usual methods.

(10) **Save Time in every way possible.**—The competent teacher will make it her aim to save the scholars' time in every possible way, and will be fertile in resources for accomplishing this end. The following plans have been adopted with success in the lower standards, where children are apt to be held back through slowness in figuring:—

(*a*) Turn the answer of an addition sum into a multiplication one by placing a figure underneath. In like manner the answer to a subtraction sum may be utilised for division by placing a figure before it.

(*b*) When a sum in addition has been correctly worked, regard the answer as the lowest row of figures for a new sum —rubbing out the separating line. This may be continued for an indefinite time.

(11) **Recapitulate frequently.**—The teacher must not forget to review, at intervals, all back work, and afford the pupils constant practice in those rules which they would be likely to forget.

The Principal Divisions for an Arithmetic Lesson.—Speaking broadly, every arithmetic lesson should consist of three principal portions :—

First, there should be the introductory mental exercises, the object of which will be to prepare for the second—or blackboard portion.

In the *second* part, the aim of the teacher must be to demonstrate, in the simplest manner, the reason of the rule she is endeavouring to teach, and also to shew clear and symmetrical ways of working examples in it.

The *third*, or practical part, consists in allowing the children to work, under the teacher's supervision, a few examples either on the blackboard, or on slates.

The Work of the Standards.

In the remarks that follow on the teaching of arithmetic in the different standards, only the *order* of instruction will, in most cases, be found indicated. Little or no attempt will be made to show the precise manner in which the different lessons are to be given. Detailed instructions on such matters will be found in the Handbook of Arithmetic, which is meant to be used as a companion work to this Manual of School Management.

The methods for teaching standard arithmetic have been arranged in *courses;* but these must not be considered as co-extensive with *lessons.* One course will generally require several separate lessons. Each is meant to clearly point out, for the teacher's guidance, both the system on which the instruction should be given, and also how much of the ground-work should be accomplished before proceeding to other parts of the subject. The work for each standard is divided into six courses.

Arithmetic in Standard I.

Children must first be Taught to Read and Write Figures.—*First Course.*—Before children are required to work sums by themselves, it must be ascertained that they can read and write, with accuracy and readiness, numbers up to thirty at least. They must, from the outset, know the way to read and write every number they may be called upon to use.

Supposing, then, that they can read and understand the formation of all numbers up to thirty, it will be quite allowable to drill them in the addition, subtraction, multiplication, and division tables up to the number twenty-four.

Before going on to formal addition and subtraction sums, the teacher should test the children's knowledge of numbers by requiring them to form groups of pencils, sticks, pens, or balls (on the frame,) so as to make up a given number. Thus: Suppose 18 pencils are required to be counted out; they may first be put in two piles of 10 and 8, then of 9 and 9, next of 6 and 12, and so on.

How to make up Numbers.—Besides mental exercises, the sums taught at this stage for slate work should afford practice in—

(*a*) The different ways in which 4, 5, 6, 7, 8, 9 can be made up by addition.

(*b*) The different ways in which numbers from 10 to 20 can be made up.

(*c*) The different ways in which numbers from 21 to 30 can be made up.
(*d*) The subtraction of numbers not greater than 10.
(*e*) „ „ „ „ 20.
(*f*) „ „ „ „ 30.

(N.B.—The addition and subtraction tables should be learnt by heart, and repeated daily.

Second Course.—This course must begin with extending the notation and numeration of numbers (*a*) up to 40, so that the children may be prepared for the explanation of the three-times multiplication table; (*b*) up to 50, for four-times; and (*c*) up to 60, for the five-times table. Good use should be made of the multiplication tables—not only to teach the division of numbers (mentally at this stage), but to form numerous varieties of mental questions. Practice should also be given in counting backwards and forwards by twos; starting sometimes from an even number, at others from an odd one.

During this course it will be wise to explain the signs, +, —, =, as they may now be used for setting sums horizontally, *e.g.*, $6+2+8=16$, $10-7=3$. For the addition sums, carrying should now be taught, but in the units' place only. The teacher must insist on the children reading every sum before they work it, and also give abundant practice in reading other numbers at sight. The numbers to be added may at times be dictated, but, as a rule, copying from the blackboard is better at this stage. The kind of sums given may be arranged in three sets—the answers to which are to be (*a*) under 40, (*b*) under 50, (*c*) under 60.

(*a*)				(*b*)			
	17	18	19		27	26	24
	14	19	20		13	17	18
	31	37	39		40	43	42

(*c*)			
	12	13	15
	13	12	6
	14	10	7
	16	18	18
			9
	55	53	55

When adding, the children should be made to say—4 units and 7 units make 11 units, that is—1 ten and 1 unit. Mark the unit and carry 1 ten to the tens; *not* merely 4 and 7 are 11, mark 1 and carry 1.

Subtraction sums must still be done without *altering* the bottom or top number. They may be of the following kinds:—

(*a*)				(*b*)				(*c*)			
	38	36	37		48	49	47		50	52	59
	14	12	21		22	12	30		20	30	26
	24	24	16		26	37	17		30	22	33

Let the children say—4 units taken from 8 units leave 4 units, mark 4 units in the units' place; 1 ten taken from 3 tens leaves 2 tens, mark 2 tens in the tens' place.

Third Course.—Begin by recapitulating the substance of courses one and two, and then proceed to teach the notation and numeration of figures (*a*) to 75, (*b*) to 90, (*c*) to 100—giving incessant practice in the addition and multiplication tables; addition sums, (*a*) of two and three lines with totals less than 75, (*b*) of two and three lines with totals less than 90, (*c*) of four and five lines with totals less than 100.

The signs for multiplication and division may be introduced and explained at this point, and appropriate examples of their use given, thus: $6 \times 7 = 42$, $2 \times 3 \times 5 = 30$, $24 \div 3 = 8$.

Difficulties of Subtraction.—The subtraction now taught must involve the process usually, but incorrectly, called "borrowing." We say *incorrectly*, for the method commonly used for subtracting, when any figure in the under line is too large to be taken directly from the one over it, is really the method of *equal increase*. The full explanation of this and other rules will be found in the "Handbook of Arithmetic."

For the present, it must suffice to recommend teachers, before proceeding to the more difficult subtraction sums, to

explain the principle of the rule to the children by shewing them that taking 6 from 8 gives the same remainder as taking 6+3 from 8+3, or 6+5 from 8+5, or 6+10 from 8+10; and, therefore, when we subtract 56 from 63, we perform a similar operation by adding 10 units to the units' place of the upper line, and one ten (=10 units) to the tens' place of the lower line.

Let the numbers used at present be kept below 100, and make the children accurate at first in sums without noughts (ciphers).

Suppose the children about to receive a lesson on the subtraction sum—

$$\begin{array}{r} 56 \\ 29 \\ \hline 27 \\ \hline \end{array}$$

Let them be taught to say the working somewhat as follows:—

I cannot take 9 units from 6 units, I therefore add 10 units to the 6 units of the upper line, and 1 ten to the 2 tens of the under line. Nine units from 16 units leave 7 units for the units' place. Three tens from 5 tens leave 2 tens for the tens' place.

Fourth Course.—With every lesson, the teacher should combine well-selected mental exercises (carefully graduated), both abstract and concrete. For this purpose the tables must be largely utilized. During this course no new tables should be learnt, as it will be found better to go over again and perfect those already known, dwelling especially on such parts as the pupils seem to have the greatest difficulty in remembering.

Children should be taught the meaning of such terms as *half*, *quarter*, and *three-quarters*, and well practised in their use.

The numeration and notation (*a*) of 100, 110, 120—to 190; (*b*) of 101, 102—to 119; (*c*) of any number between 100 and 200, should next be taught.

The addition sums given, may consist (*a*) of three lines of

units and tens, (*b*) of four lines of units and tens, (*c*) of five or more lines of large and small numbers, with totals in each case below 200.

Practice in subtraction may be extended to numbers ranging from 100 to 200, (*a*) with those requiring no alteration in upper and lower line, (*b*) with those requiring the addition of ten units to the units' figure of the top line, (*c*) with those requiring the addition of 10 tens to the tens' figure of the top line.

The same way of adding and subtracting the tens' column must be observed, as was shown in Course 2, for the units' column, *e.g.*, in the sum—

$$\begin{array}{r} 82 \\ 33 \\ 44 \\ \hline \\ \hline \end{array}$$

the children should say—4 tens and 3 tens are seven tens, and 8 tens are 15 tens; mark 5 tens in the tens' place and 1 hundred in the hundreds' place.

Similarly, if the subtraction sum is—

$$\begin{array}{r} 237 \\ 64 \\ \hline \\ \hline \end{array}$$

say—I cannot take 6 tens from 3 tens, I therefore add 10 tens to the tens' figure of the top line, and 1 hundred (= 10 tens) to the hundreds' place of the bottom line. Six tens from 13 tens leave 7 tens for the tens' place in the answer, and 1 hundred taken from 2 hundred leaves 1 hundred for the hundreds' place.

Fifth Course.—All through this standard tables must be assiduously taught—the preference being given to addition. With the aid of the twice-times multiplication table, a little should be taught about half-pence and pence, and three-times may similarly be utilized for lessons on three penny pieces.

With regard to notation and numeration, if the children

thoroughly understand the reading and writing of numbers from 100 to 200, there will be very little difficulty experienced in carrying them on to 1,000. *Firstly*, deal with 100, 200—up to 1,000, and with numbers having a cipher in the units' place; *secondly*, with numbers having a cipher in the tens' place; *thirdly*, with any number up to 1,000.

In *addition*, construct sums of four or five lines (*a*) with totals below 300, (*b*) with totals below 500, (*c*) with totals below 1,000. In *subtraction*, there may be sums of three figures, with carrying (*a*) from the units' place only, (*b*) from the tens' place only, (*c*) from both. Ciphers should now be freely used.

Sixth Course.—Notation and numeration may be extended to the reading and writing of numbers (*a*) up to 2,000, (*b*) up to 5,000, (*c*) up to 10,000.

Much practice must be given to the addition and subtraction of any numbers arranged in sums of two or three figures. *Carrying* from the hundreds' column should be explained, and the addition answers may be extended as far as 5,000.

If the attainments of the children warrant such a step, easy multiplication and division sums by two, three, and four may be introduced, and some simple problems involving (*a*) addition only, (*b*) subtraction only, (*c*) both rules.

The children, during their stay in this standard, should be practised in easy questions about *change* from 3*d*., 6*d*., 1*s*., up to 5*s*., and be made practically acquainted with what makes up a pound, a foot, a yard.

Having now gone through the work of Standard I., it may be as well to remark that, although the scientific and strictly correct method of working is given, it will be unwise to restrict the children to this mode of doing sums. In order to gain facility and confidence, it is necessary that they should likewise do a large amount of mechanical work. For this, the sums may be longer, and embrace a number of figures.

Teachers must bear in mind that there are two distinct

objects to be kept in view: (1) To make the children thoroughly understand the reason for each process, and (2) to give them the power of rapid and accurate calculation.

The principal difficulty being what is generally termed *borrowing* in subtraction—when the lower figure is higher than the one above—it is of importance to hit upon a plan which may be as little of a puzzle as possible to these exceedingly young learners.

We will give three of the methods commonly used. It is not easy to pronounce more in favour of one than another.

(1) Make the children add 10 units to the top figure, and add one (ten) to the lower figure of the next column.

(2) Teach children to place a small 1 before the top figure (thus adding 10 to it), and when they rub it out, to add it to the lower figure of the next column.

(3) Here the children do not *add* the 10 units to the top figure. Instead of this, they subtract the lower figure from 10, and add the difference to the top figure. This plan has manifest advantages, especially in subtraction of money, and weights and measures.

The standard should often be practised in subtraction sums in which 0 is taken from 0, and 10 from 10.

It will be found an excellent plan to procure or prepare large-print sheets of sums, arranged for a fortnight's work. These should be used as follows in the lower standards:—

(1) A sheet having been placed in front of the class, children should work the sums aloud, the answers being *named*, not *written*.

(2) When they can do this easily, the same sums may be worked on slates.

Arithmetic in Standard II.

Lay a good foundation in the Lower Standards.—If teachers desire to find good arithmeticians among the elder scholars. they must devote their utmost skill and

earnestness to the teaching and training of the younger pupils.

At the end of the Second Standard course of lessons, all the processes used in the simple rules ought to be perfectly known, notation and numeration completely mastered, and some readiness acquired in dealing with problems involving two distinct operations. One great cause of the very meagre results in problematic arithmetic, is that so few attempts are made to teach it systematically in the early stages. Consequently, in the later ones, there is too much to be grasped in a short time.

If a teacher should exclaim, "Ah! but how is this to be done?" The answer is: "Analyse arithmetical problems yourself; give specimen lessons to quite small children; instruct the younger teachers as to the steps they must take in order to ground the scholars thoroughly. Always descend to first principles—to the simplest elements—for simplicity is the great promoter of progress, and is real science."

Let Problems be Easy and Carefully Chosen.—Properly graduated elementary problems are very seldom met with. When children have learnt addition, they should be practised in problems involving that rule only; the same remark applies to subtraction; but, when both rules are well-known, then questions may be put involving the use of the two rules. So, when multiplication has been taught, the problems first given should only require multiplication; next multiplication and addition; then multiplication and subtraction; and finally sums including the three rules. In the same way division may be combined with addition, then with subtraction, and lastly with multiplication.

In all problems for this and the other standards, let the children be required to write suitable definitions of each operation. These should at first be placed by the side of the different steps in the sum, but, later on, more after the manner of the unitary method.

First Course.—The multiplication tables, and consequently the division tables, may now be extended.* For this course let the children be practised from twice 1 to twice 20, three-times 1 to three-times 20, four-times 1 to four-times 20; and in the pence tables as far as $36d. = 3s.$ Teachers are not always quick to notice what excellent opportunities the multiplication tables afford of demonstrating the value of money. Four-times can be used for farthings and pence; three-times for threepenny pieces, and so on. Questions on change out of a shilling, a florin, and a half-crown, and on the principal aliquot parts of these coins, should be given here. Questions about pounds and ounces will also be serviceable.

In *numeration and notation* there is much to be done all through this standard. The teacher's efforts in this course must be to get the children to read numbers over 10,000 and under 20,000 (*a*) without ciphers, (*b*) with one cipher in various positions, (*c*) with any number of ciphers.

Addition sums of three or four lines, and with totals below 20,000, may be worked on the blackboard and slates—great attention being given to making the children understand the carrying from the hundreds to the thousands, etc.

In *subtraction*, let the top and bottom lines consist of four figures each, with carrying from the units and tens. Easy problems in addition and subtraction should form the basis of, at least, three lessons per week.

Multiplication must be commenced in earnest. It is more difficult than many people suppose, to make children understand the object of multiplying. Accordingly, the teacher should begin with naming a number of concrete objects, and then require the children to increase this number by using the multiplication table.

For instance, having asked how many legs a chair has,

*In some classes the extended tables might be found too difficult. It must, therefore, be left to the discretion of the teacher to decide whether it is better to teach them now or wait till a higher standard is reached.

make them find out, by slate arithmetic, how many legs 16, 18, 26 chairs have.

The same operation may be repeated, indefinitely, with boxes of nails, eggs, *e.g.*, 160 nails in one box, how many in 6, 8, or 12 boxes.

Children having thus grasped the meaning of multiplication, may go on, in the next place, to reason out the process in the following manner:

Supposing it is required to multiply 8,537 by 4, teach the pupils to say 4 times 7 units are 28 units, mark 8 units and carry 2 tens; 4 times 3 tens are 12 tens and 2 tens carried are 14 tens, mark 4 tens and carry 1 hundred; 4 times 5 hundred are 20 hundred and 1 hundred carried are 21 hundred, or 2 thousand 1 hundred, mark the hundred and carry 2 thousand; 4 times 8 thousand are 32 thousand and 2 thousand carried are 34 thousand, mark 34 thousand. There will be very little difficulty in teaching this, if they have learnt to *add* properly. It will not always be necessary to make the class name the steps in full; but the teacher should require it occasionally, to make sure that they do not forget the explanation that has been given.

A right understanding of the science of multiplication having been thus attained, thorough exercise in the mechanical working of sums containing a number of figures, may, in the next place, be given.

Division.—Of the four simple rules, division undoubtedly presents the greatest difficulty to young scholars. It may be rendered easier if they are trained to use, regularly, the multiplication table as a division table: thus—six eights are 48; there are eight sixes in 48; 6 will go 8 times into 48. During the first lessons it will be a help if the multiplication table is hung where the children can see it. The teacher will then proceed to give concrete examples, as recommended above for multiplication, and also teach them to analyse a sum in division, as follows:—

Supposing it is desired to divide 8,241 by 3. Threes in 8 thousand are 2 thousand with 2 thousand (or 20 hundred) over, to be carried to the 2 hundred. Threes in 22 hundred are 7 hundred with 1 hundred (or 10 tens) over, to be carried to the 4 tens. Threes in 14 tens are 4 tens with 2 tens (or 20 units) over, to be carried to the unit. Threes in 21 units are 7 units.

Though multiplication and division are the two principal rules to be taught in this standard, it is of real importance to press forward diligently with addition, and never let a day pass without some practice in this rule. True, the class *have learnt* how to do it, but accuracy and quickness have yet to be attained.

The pupils should be trained to read the answers to their sums.

When remainders occur, they should be taught to write them with the addition sign (*e.g.*, Ans. $275 + 3$).

It is very desirable that children should be shewn that—

(1) Multiplication is a shortened form of addition.
(2) Division is a shortened form of subtraction.
(3) Division is the opposite process to multiplication.

Second Course.—In tables, the children may learn from 5 times 1 to 5 times 20, and from 6 times 1 to 6 times 20, and they should be constantly practised in 2, 3, and 4 times up to twenty. This must on no account be *substituted* for the daily repetition of the addition and multiplication tables already learnt.

The pence table must be extended to 5*s.*, questions given on a crown and a half-sovereign, on a pint and a quart, and frequent use made of the signs $+$, $-$, $\times$, $\div$, $=$.

Numbers from 20,000 to 40,000 should be taught; while the *addition* sums may consist of four and five lines with totals below 40,000. In *subtraction*, it is best to keep to four figures in each line, with carrying from units, tens, and hundreds when explaining the science; at other times, sums of con-

siderable length may be used with advantage. Multiplication and division should be treated in the same way. *Problems* in these rules must be given three or four times weekly.

Third Course.—Seven, eight, and nine times (extended) and the pence *table* to 96*d.* must be learnt. Questions on the different coins that make a sovereign, and on the change out of a sovereign, will give good exercise in the mental portion. Inches, feet, and yards, may also afford material for a few questions.

At this stage, the words sum, total, difference, remainder, may be explained.

Acquaintance with *numbers* should be extended up to 70,000, and be taught by the same steps as before, and this number must be the limit to the totals of those *addition* sums which are used for analysis. In *subtraction*, give three or four figures in the under line to be taken from a number consisting of five figures. The problems may involve both addition and subtraction.

For the reasons given above, children should be practised in multiplication and division sums containing (*a*) not more than four figures, (*b*) any number of figures.

As much variety as possible should be introduced in the setting of sums. A child who will multiply correctly 4973 by 97, is often puzzled if asked to multiply 28 by 56.

Fourth Course.—The extended *multiplication tables* must be 10, 11, and 12 times. The pence table will require to be carried to 144*d.* Questions on all the coins may be given. The teacher should also introduce and explain the words multiplier, multiplicand, product, divisor, dividend, quotient.

100,000 will now form the higher limit for exercise in *notation and numeration*. Easy sums, with and without ciphers, must be given promiscuously.

Addition sums may consist of five or more lines containing three and four figures, with answers less than 100,000. In

subtraction, there may be an upper line of three, four, or five figures (including ciphers), and a lower line of two, three, or four figures.

Easy composite numbers, *e.g.*, 21, 27, 30, should be used both for multiplying and dividing. The reason for multiplying by factors must be given. Division sums must be first kept to numbers that give no remainder. Attention should also be drawn to the multiplication and division (in one line) of numbers by 10, 20, 30, etc.

Fifth Course.—Recapitulate the extended multiplication tables, and the pence table. Teach shillings' table to 100*s.* $=£5$, and something about gills, pints and quarts.

In the reading and writing of numbers below a million, or those of six figures, the children must be led to see that if they can read three figures, it is easy to read six, since every group of three figures is read in the same way. Thus, 686,686 is read as six hundred and eighty-six (thousand), six hundred and eighty-six (units); and it will be wise for the teacher to use numbers similar to these for the first lessons—203,203; 520,520; 100,100.

Six and seven lines with 2, 3, 4, 5 figures may now be given for *addition*, so long as the total is kept below one million. For *subtraction*, the lines may consist of any number of figures up to six, although in this rule, as well as in the others, the teacher must remember to introduce variety by giving small numbers occasionally, *e.g.*, $18 + 6 + 30 + 9$; $1098 - 17$; 38×7, 2170; $281 \div 3$, $97 \div 5$.

Long Multiplication.—Long multiplication must now receive great attention, and be made exceedingly clear. Supposing the sum given is to be multiplied by 347, let the children be made to notice that they must multiply first by 7 units, then by 4 tens, and then by 3 hundreds. Unless great care is taken, children cannot realize *when* they multiply by tens, and hundreds, and thousands. Ex.:—2407×369. Here most children would say that they multiplied first by 9

(units); second by 6 (units); third by 3 (units). But, in truth, the 2407 will be multiplied by 9, 60, and 300.

It will also be advisable, at first, to supply the ciphers that are generally omitted when multiplying by tens and hundreds.

As soon as the tables are *thoroughly* known, there will be no trouble in getting children to work even long multiplication sums with complete accuracy. It must be pointed out that the first figure of a line must invariably be placed under the figure multiplied by.

In *division*, any number below a million may be used for the dividend, with such composite divisors as 32, 36, 48, 49, 54.

A few easy *problems*—involving (1) multiplication, (2) division, (3) both—may be given.

Sixth Course.—Plenty of practice must be afforded in all the tables hitherto learnt; and the shillings' table carried to 200*s.* = £10. The children should also have some knowledge of gallons and pecks.

In *notation and numeration* the teacher should keep to six figures, unless she considers that the children are sufficiently advanced to read numbers of seven figures.

Quite half the sums now given should be of the nature of problems.

Let the children have plenty of practice in multiplying and dividing by factors.

Multiplication by $\frac{1}{2}$ and $\frac{1}{4}$ is not difficult if the principle is taught by mental exercises and simple examples on the board. Any child can see that 6 multiplied by two and a half must be twice 6 plus the half of 6.

Arithmetic in Standard III.

Introductory Remarks.—(*a*) The *arithmetical tables* will consist chiefly of the extended Multiplication table, of the Money tables, and also of the Weights and Measures as pre-

paratory to the work of the next standard. The range of arithmetic for Standard IV. is so extensive, that it should be lightened as much as possible by getting the children acquainted with all useful preliminaries. The tables should be well illustrated by the help of coins, weights, and measures.

(*b*) Besides the mental questions that naturally arise from the tables, and those which should precede all the arithmetic lessons, there ought now to be about two lessons weekly for special training in certain quick methods of working sums mentally.

(*c*) In the regular standard work, there are two new departments to consider, viz., reduction of money, and addition and subtraction of money—the former being preparatory to the complete understanding of the latter. The Code does not mention reduction of money, but it is advisable to teach it, as being the necessary foundation of all the compound rules.

Reduction.

It is possible to make reduction very attractive. How is it, then, that it is so often regarded as a sort of bug-bear by both teachers and learners? It needs to be *brought home* by some simple expedient; instead of which, children are often talked to for twenty minutes at a stretch, and yet only look all the more bewildered as to what is meant by "reducing."

The Meaning of Reduction.—In the first place let the teacher make *every* child understand that to reduce money only means to change it from one denomination to another: *i.e.*, to change its form, not its value; that, when they go out with a shilling and get it changed into twelve pence, and when they take out twelve pence and ask some shopman to change it for a silver shilling, they have done a sum in reduction—they first reduced that shilling to twelve pence, and then they reduced twelve pence to a shilling.

A perfect knowledge of the English Coins indispensable.—The children should be made familiar with all our current money. This is a matter often neglected, but it is inexcusable indolence in a teacher. The value of several coins is very confusing to the young; and the only way to make the subject clear, is to shew them over and over again the value in money of half-a-crown, a florin, etc., and allow them to make up each coin with money of different denominations.

Varied Exercises with Coins.—It is not very difficult to make a coin-frame with a few farthings, pence, threepenny bits, shillings (or what will represent them), strung on wire; but a handful of counters on the table is better than nothing; or even the ball-frame may be of service for the purpose. But, at any rate, let the children have something tangible wherewith to illustrate the lesson.

The counters or balls may be imagined to be any kind of money, for the time being, and can then be "reduced" before the children's eyes to some other denomination.

For instance, the teacher may say:—"Come, children, let us suppose these counters are all pennies, how am I to change them into shillings?" She would then make them help her to separate them into groups of twelve, for each of which she would quickly substitute a shilling piece. "But, see, I have seven over, can I make up a shilling with them?" "No." "Then what must they remain?" "Pence."

Next the same counters might represent threepenny bits, and so on.

By this simple means, the difficulty which seems so formidable to young minds when learning this rule, is entirely surmounted. We should strongly advise continual coin practice for a week or two before the class is permitted to work reduction sums on their slates. In the same way, the reduction of avoirdupois and other weights and measures may be illustrated.

The Points to be Decided in Reduction.—In the working of reduction the chief point for the child to decide is —"Am I to multiply or divide?" Children are usually told "to multiply, if the given terms are to be reduced to a lower denomination; to divide, if a higher denomination is required." But they will never understand these directions until they are carefully taught the ascending and descending scale of value in each instance. They have not been accustomed to handle money, and what seems natural and easy to us, is vague and dark to them. The teacher can help to clear up the mystery by bidding them notice whether the given terms will become more or fewer *in number* by the change.

Reduction also may be made much clearer by telling the children to *write* the denomination obtained by each step in a reduction sum, thus:—

Reduce twenty shillings to farthings.

s.
20
12

240 pence.
4

960 farthings, ans.

Compound Rules.

Method of Teaching Money Sums.—The method of working addition and subtraction of money is but an extension of the principles of simple addition and subtraction. In the latter, the scholars have been dealing with units, tens, hundreds, thousands; in the former, they must be taught to deal with farthings, pence, shillings, and pounds, and to pass readily from one to the other. The great difference between the two classes of sums is, that in the simple rules there

is only one multiplier or divisor (viz., 10) necessary to mark the changes, whereas in the case of money we must use several different numbers for the purpose. Still the principle of the operation is the same in both cases. As in simple addition we add up units or tens and divide by 10 to pass to tens or hundreds, so, in the addition of money, we add up the farthings and divide by 4 to pass to pence; we add up the pence and divide by 12 to pass to shillings, and so on.

Long Division.—This is complicated work for Standard III., and the teacher must be content to advance step by step. For some time the divisor should not exceed two figures—keeping the units' figure considerably below the tens' figure. Children must be trained to put a neat dot under the figures they "bring down," and not to forget to place a nought in the quotient, when, having brought down one figure, they find the divisor will not "go" until another is brought down.

Division sums ought to be proved by multiplying the quotient by the divisor and adding in the remainder. This will help the children to realise that division is the reverse process of multiplication, a fact which it is important to impress upon them by all possible means.

Problems in the simple rules, and in compound addition and subtraction, must be frequently given; success depends, to a great extent, on their careful selection and graduation.

Teach the Principle of Fractions early.—Fractional arithmetic would not present such enormous difficulties if it were led up to in the lower standards. The principle may be taught by dividing before the class, such objects as a cake, an orange, apple, or large turnip, and *shewing* into how many equal parts it may be divided, and what is meant by $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{12}$, $\frac{3}{4}$., etc. Lines may be drawn and divided on the board, and the children exercised in finding out the third, sixth, or twelfth of a shilling or sovereign. Fractions may be

prepared for by associating division with multiplication, as follows :—

Three tens are... 30
How many tens in... ,,
How many threes in ,,
What is the third of ,,
Two-thirds of... ,,
One-tenth of ,,
Five-tenths of... ,,

N.B.—To work the scheme that follows, the tables should be kept for separate lessons, while the compound and simple rules should be taught on alternate days. If it is not found possible during the early stages to combine reduction, addition, and subtraction in one lesson, reduction and addition may be taken on one occasion, and reduction and subtraction on another.

The sums must now be worked occasionally on paper.

ARITHMETIC FOR STANDARD III.

Course.	Tables.	Reduction.	*Addition of Money.	Subtraction of Money.	Multiplication.	Division.
I.	13 times multiplication. 14 " " Farthings to 48f. = 1s. Pence to 100d. = 8s. 4d. Shillings to 140s. = £7.	Pence to half-pence and farthings. Pence to 3d., 6d. pieces. " to shillings.	Mental addition (with farthings). A few lines of pence and shillings. Do. £ s. d., carrying in one denomination.	Mental subtract. (without farthings). Subtraction of s. d. " of £ s. d. (without carrying).	Simple mult. with three figures in the multiplier. Probs. involving multn. and addn.	Short divison by composite numbers to 100. Long div. by 31, 41, 51. 61, 71, 91, etc. Problems involving div. and addn.
II.	15 times multiplication. 16 " " Farthings to 96f. = 2s. Pence to 168 d. = 14s. Shillings to 200s. = £10.	*Pence* to 3d., 4d., 6d. pieces. 3d., 4d.. 6d. pieces to *Pence*. Ditto to half-pence. " to farthings.	Mental addition. Add s. d. f. carr. in two denominations. £ s. d. f. carrying in two denominations.	Mental subtract. (with farthings. Subtract £ s. d. f. (without carrying). With carrying (one denomination.)	Mult., money, by 2, 3, 4, etc., to 10. Simple mult. with four figures. Probs. with mult. and addition.	Div. by comp. numbers, using 13 and 14 times. Long div. by 43, 53, 73, 83, etc. Problems with div. and addition.
III.	17 times multiplication. 18 " " Farthings to 144f. :8s. Pence to 240d. = 20s. Shillings tables proceeding by hundreds.	*Shillings* to Pence. " to 3d., 4d., 6d. pieces. Pence to *Shillings*. 3d., 4d., 6d. pieces to shillings.	Mental add. and aliquot parts of 3d., 6d., 1s. Add £ s. d. f. (dictated) Easy money problems, (addition only.)	Mentl. sub. of d. and f. from 1s., 2s., 3s., 4s. £ s. d. f., with carr. in s. f. £ s. d. f., with carr. all through.	Mult. with composite numbs., using 13 and 14 times. Problems with add. and subtraction. Do. mult. and sub.	Long div. 96, 86, 76, 66, etc. Long div. with units fig. higher than tens. Problems with div. and subtraction.
IV.	19 times multiplication. 20 " " Recapitulate f. d. s. Avoirdupois, long mea.	*Florins* to Pence. *Half-crowns* to pence, 6d., 3d. pieces. Pence, 6d., 3d. pieces to Half-crowns.	Mntl. addition, aliquot parts of 2s., 2s. 6d., 5s.* Addition of money generally. Easy money problems.	Mental sub. of d. & f. from 1/6, 2/6, 3/6, 4/6. Sub. of money generally. Easy money problems (subtraction only.)	Mult. with composite numbers using 15 and 16 times. Problems with mult., add. and sub.	Division, using 15 and 16 times. Long div. by 101 up to 109. Probs. with div., add. and sub.
V.	13, 14, 15, 16 times. Money tables. Time.	*Crowns* to pence, 6d., 3d. pieces. Pence, 6d., 3d. pieces to crowns.	Mntl. addition, aliquot parts of 10s., 20s.‡ Add. sums, *timed*. Easy money problems involving add., sub., and reduction.	Mental sub. of s. and d. from 3/-, 4/-, 5/-, 6/-. Subn. sums, *timed*.	Mult. with composite numbers using 17 and 18 times. See Course IV.†	Division using 17 and 18 times. Long div. with tens fig. higher than hundreds *e.g.*, 497. See Course IV.†
VI.	17, 18, 19, 20 times. Capacity, and Recapitulate.	*Sovereigns* to ½-sov., to Crowns, to ½-crowns, to shillings.	Problems in reduction. Addition sums, *timed*. Easy money problems	Mental sub. of money generally. Subn. sums, *timed*. involving add., sub., and reduction.	Mult. with composite numbers, using 19 times, and with 200, 300, etc., 2000, etc. See Course IV.†	Long division using any divisor below thousands. Long division by any number.

*Simple addition must be kept up throughout this Standard. Sums of 3 and 4 columns and 8, 10, or 12 should be given.

†If the condition of the children with regard to problems is satisfactory, short multipn. and division of money may be substituted for this part of the course.

‡If there is not sufficient time, the teacher may transfer this portion to the mental arithmetic lessons, or defer it until Standard IV. is reached.

Arithmetic in Standard IV.

Introductory Remarks.—The arithmetic of this Standard is rather complicated, and requires much discretion and skill in its treatment.

Drilling in *aliquot parts* is very desirable; not only does it afford good mental exercise in elementary fractions, but it is also preparatory to the rule of *Practice* required in the next standard.

The various tables must be constantly repeated during the whole of the school year.

Mental arithmetic should include easy reduction of money, weights and measures, simple questions about wages by the day, week, and month, and bill items.

Reduction.—As the pupils have been previously practised in *reduction* of money, they will be somewhat prepared to go on with that of avoirdupois weight. They must not be kept exclusively to either *descending* or *ascending* reduction for long together, but the two should be intermixed so as to *necessitate* thinking. Instead of always using the term *reduce*, say "*Change* from——to——;" "How many——are there in——," etc. At the first lessons, let the scholars pass from one denomination to the *next* above or below it.

A thorough teacher will give plenty of practice in the first four rules as applied to weights and measures, as well as in the reduction exacted by the Code. Problems ought to be given as much as possible all the year through.

In Standard IV. very easy addition and subtraction of vulgar fractions may with advantage be taught.

It must not be overlooked that an initial acquaintance with the metric system is now necessary for Standard IV., and that long tots, carefully graded in difficulty, must be used from the third standard upwards.

ARITHMETIC FOR STANDARD IV.

Course.	Tables.	Reduction.	Money.	Weights and Measures.	Problems.
I.	Constant repetition of all tables previously learnt. Aliquot parts of 3d., 6d., 1/- Do. do. Avoirdupois.	*Shil.* to sov. ½-sov., crn., flr. „ 3d., 6d. pieces, to pence, half-pence, and farthings. *Avoirdupois.*	Mult. and div. by 2, 3, 4— to 12, and by factors. Addition } money Subtraction }	Addition and subn. of *two* denominations. The same of *four* „ „ „ *all* „	Problems in the simple rules Do. addition and subn. of money. Do. do. Avoir. weight
II.	Constant repetition of all tables previously learnt. Aliquot parts of 1/3, 1/4, 2/- Do. do. Long measure.	*Crowns* and ½-*Crowns* to sov., ½-sov. to shillings, pence, 6d., 3d. pieces. *Dry measure.*	Mult. by two figures. By factors. Long addition and subtraction.	Addition and subn. of *two* denominations. The same of *four* „ „ „ *all* „	Problems in add. and sub. of money. Do. mult. and div. of money Do. add. and sub. of Long measure.
III.	Constant repetition of all tables previously learnt. Aliquot parts of 2/6, 3/4, 4/- Do. do. Dry measure.	*Sovereign* and ¼-*Sovereign* to crowns, to ½-crowns, shillings, florins. *Long measure.*	Multiplication by 13 to 20. Division by 13 to 20. Tots.	Addition and subn. of *two* denominations. The same of *four* „ „ „ *all* „	Problems involv. mult. and addn. of money. Do. div. and add. of money. Do. division and subn. of Capacity measure.
IV.	Constant repetition of all tables previously learnt. Aliq. pts. of 5/-, 6/8, 10/, 20/- Do. Sq. measure (for boys.) Do. Avoir. and Long meas. (for girls.)	*Sovereign* and ¼-*Sovereign* to pence, 6d., 3d. pieces, ½d. and ¼d. *Square measure.*	Multiplication by three figures. Division by two figures. Tots and subtraction.	Addn., subn., mult. and div. of *two* denominations. The same of *four* „ „ „ *all* „	Problems involv. mult. and sub. of money. Do. div. and sub. of money. Do. addition and subn. of Square measure.
V.	Constant repetition of all tables previously learnt. Aliquot parts of money. Do. do. of time.	*Any kind of Money.* *Avoirdupois and Dry Measure.* *Time.*	Mult. with multiplier up to 1000. Division by three figures. Tots, twelve lines. Sub.	Addition, subtraction, multiplication and division.	Redn. of money problems. Probs. of weights and measures and time, involving multn. and addn. Do. do. div. and sub.
VI.	Constant repetition of all tables previously learnt. Aliquot parts of money. Do. of Weights and Meas.	*Any Money.* *Any Weights and Measures.*	Mult. by 5½, 6¼, etc. Division by three figures. Tots, sixteen lines. Subtraction.	Recapitulate.	As in Course V.

Arithmetic in Standard V.

Introductory Remarks.—The arithmetic of this Standard is comprised under the heads of Practice, Bills, Unitary Problems, and Vulgar Fractions.

All arithmetical tables must be kept up by regular repetition. The mental arithmetic is of increased importance, and should be made largely auxiliary to the scheme of lessons suggested for Standard V. Questions suitable for mental calculation should be given under each of the four heads just mentioned, and also on the measures and multiples of different numbers.

Exercises and problems on the back work should be set occasionally, although the rules now taught give much practice in the different kinds of multiplication, division, and reduction.

Practice.—In practice especially the teacher must not be afraid of a little *over-statement* by the children in the way of writing particulars of each process, and the value of the figures they put down.

In learning practice, short sums must be given at the outset, and fractional remainders avoided. The value of each line should always be thoroughly understood and written out, and different ways of working one sum be now and then practised. The children should be trained to take the smallest number of aliquot parts possible (consistent with ease in working), and not to keep merely to the $\frac{1}{2}$ and $\frac{1}{4}$, as is often the case. The first few lessons should be devoted to the very useful exercise of drawing out sketches of different practice sums, until the children find it easy to choose the best aliquot parts. To assist them in this, the table of aliquot parts should be placed before the class. Sometimes a sum of money should be given for breaking up into different sets of aliquot parts, and the class asked to name the set they think the most expeditious for working. Thus, 18*s.* $8\frac{3}{4}$*d.* may be broken up into 10*s.* + 5*s.* + 3*s.* 4*d.* + 4*d.* + $\frac{1}{2}$*d.* + $\frac{1}{4}$*d.* or 10*s.* + 6*s.* 8*d.* +

1*s.* 8*d.* + 4*d.* + ¼*d.* + ½*d.*; or 10*s.* + 4*s.* + 4*s.* + 8*d.* + ½*d.* + ¼*d.*; or 10*s.* + 5*s.* + 2*s.* 6*d.* + 1*s.* + 2½*d.* + ¼*d.*, etc. The same kind of exercise may be used with weights and measures. In short, the rule of practice should be made the most of both by the teacher and pupils.

Rule of Three by the Unitary Method.—In learning the *Unitary Method*, children are generally puzzled how to make the initial statement. There is no magic recipe for solving this difficulty. The best plan is to begin with simple examples, set good models before the children, and train their intelligence by suitable questions. The words for commencing the statement of a problem are indicated in the problem itself. *Cancelling* conduces greatly to quick working, but the children should be carefully instructed in its object and value. We must remember that in unitary problems we multiply by one number and divide by another, and these are usually placed in a fractional form, the multiplier forming the numerator and the divisor the denominator. Troublesome remainders should be avoided in the problems given during the first three or four courses.

Rule of Three by Statement.—In the fifth and sixth courses the Rule of Three has been introduced, partly for the sake of those teachers who wish their scholars to be able to work by both methods in this standard, and partly to further the work of Standard VI.

In teaching the Rule of Three by *statement*, let the children ask themselves—

(1) In what denomination should the answer be? then let them place that term which is in the same denomination to the right hand—making it the third term.

(2) Will the *answer* be *less* than the third term, or *more?* A little reflection will tell them this.

If more, then the higher of the other terms must be put in the second place; if less, then the lower term must be in the second place.

This is the simplest way of commencing the exceedingly difficult process of a Rule of Three sum. If taught thus, it is easy to explain the principle later on.

Blackboard Practice Essential.—Let it be again and again impressed on every teacher, that, to have plenty of blackboard demonstration throughout the school is the short cut to good arithmetic. The younger teachers need continual instruction in this part of the work, and will probably seek to evade it unless the head-master or mistress is firm on the point.

In no rules is it more necessary to work blackboard sums than in reduction and the Rule of Three; for though the children may often produce the correct answer, yet they will have arrived at it by clumsy, roundabout ways. One great use of instruction in arithmetic, is to learn the quickest and easiest method of carrying out the various operations. Brief modes of working fractions, proportion, and interest sums, are numerous, and cannot be discovered by the children if they are left to work alone and unaided, except for a few hurried words of explanation.

It is grievous to see boys and girls wasting their time poring over books and test-cards which they do not in the least comprehend, while an experienced teacher contents herself with walking round and marking each slate with a large cross or capital R, as the case may be.

If inspectors, on their visits without notice, would ascertain how much time is devoted daily to careful mental arithmetic and blackboard practice, they would be able to form a very fair idea of the ability and energy of the teaching staff.

Bills of Parcels.—With regard to bills, the children require to be taught not only expeditious methods of working the several items, but also the proper *form* of beginning, dating, and receipting for payment. These sums can be made to require much calculation, but for this standard

accuracy, neatness, and readiness in working bills of moderate difficulty, are the main requisites. Really *necessary* working should be shewn by the side. The bills given should be those of grocers', drapers', butchers', bakers', stationers', painters', and others likely to occur in actual business. It is of real consequence that scholars should be trained from the first to work bills of parcels by practice, avoiding the turning of each item into a little multiplication sum.

Fractions form a very special feature in the arithmetic of Standard V., and should be taught with the utmost care, so that the children may, from the beginning, get clear ideas of the reason of the various processes of adding, subtracting, and so on. The different steps in the teaching are plainly indicated for the six courses, but it will be necessary for the teacher to avail herself of lines, diagrams, and objects, to illustrate the equality of $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$; of $\frac{8}{12}$, $\frac{4}{6}$, $\frac{2}{3}$; the sum of $\frac{3}{4}+\frac{1}{2}$, of $\frac{2}{3}+\frac{1}{2}$; the difference between $\frac{1}{6}$ and $\frac{1}{9}$, etc.

N.B.—Great attention should be given to the neat appearance of sums. It is a good plan to let children copy them, when correctly worked, into their note-book, attention being paid to right placing and clear statement.

ARITHMETIC FOR STANDARD V.

Course.	Practice and Bills of Parcels.	Unitary Method and Rule of Three.	Vulgar Fractions
I.	(*a*) Parts of 1d. and 1/-. (*b*) Bills; cost of articles below 1/-. (*c*) ,, with cost of articles from 1/- to 5/-.	(*a*) Problems with small numbers and no reduction. (*b*) 1st by statement. (*c*) 2nd by unitary method.	(*a*) Nature of a fraction. (*b*) Equality of fractions by multiplying numerator and denominator.
II.	(*a*) Parts of £1. (*b*) Bills; cost of articles with halves, quarters, at easy prices.	(*a*) Problems with one reduction. (*b*) ,, by statement. (*c*) ,, by unitary method.	(*b*) Equality of fractions by dividing numerator and denominator. (*c*) Addition and subtraction of fractions with the same denominator.
III.	(*a*) Parts of £1, with any number of lines. (*b*) Comp. Prac. Avoirdupois. (*c*) Bills with dozen, half-dozen.	(*a*) Problems with one reduction (Dry measure.) (*b*) Problems with two reductions ,, ,, (*c*) ,, on dividends.	(*a*) Mixed numbers and improper fractions. (*b*) Fractions to lowest terms by inspection. (*c*) Method of finding G.C.M. by inspection, by rule.
IV.	(*a*) Parts of 1d., 1/-, £1, with multiplication. (*b*) Comp. Prac. Long Measure. (*c*) Bills with dozens, scores, gross, hundreds.	(*a*) Problems with one reduction (Long Measure.) (*b*) Problems on rates and taxes, 1, 2, or 3 reductions. (*c*) Problems with three reductions (Money and Long Measure.)	(*a*) Use of G.C.M. (*b*) Addition and subtraction of mixed numbers and improper fractions with the same denominator. (*c*) Method of finding the L.C.M. by inspection, by rule.
V.	(*a*) Any practice sum. Money (with fractions.) (*b*) Comp. Prac. Capacity. (*c*) Bills involving easy practice (sums of money.)	(*a*) Time problems, by statement. (*b*) ,, ,, by unitary method.	(*a*) Use of L.C.D. comparing fractions. (*b*) Addition of fractions requiring use of L.C.D. (*c*) Subtraction of fractions requiring use of L.C.D.
VI.	(*a*) Problems in practice (money.) (*b*) ,, ,, (Weights and Mea.) (*c*) Bill for small amount cost of large quantities being given, *i.e.*, cost of qrs., lbs., at so much the ton.	(*a*) Weights and measures, by statement. (*b*) ,, ,, by unitary method. (*c*) Simple rule of three (finding 1st, 2nd, 3rd, 4th terms.	(*a*) Easy problems involving addition of fractions. (*b*) Easy problems involving subtraction of fractions. (*c*) Easy problems involving addition and subtraction of fractions.

Supplementary Work.—I. *Metric System*—(*a*) Decimal Notation. (*b*) Terms for ascending series. (*c*) Decimal Coinage. (*d*) Reduction. (*e*) The four rules.

,, ,, II. The children of Standard V. should be frequently practised in adding money columns with speed and accuracy.

,, ,, III. Boys should be taught the mensuration of squares, rectangles, and triangles; floors, walls.

Arithmetic in Standards VI. and VII.

Introductory Remarks.—The time for the instruction of the sixth standard in arithmetic must be carefully economised, for there is much to be done. If the teachers of the previous standards have acted wisely, the children will be proficient in vulgar fractions and proportion, and will know something of the decimal notation. This will lighten the work, and make it possible at once to proceed to the rules now specially required.

Great attention must be given to assigning the reason of the rules taught, and also for any brief methods of working introduced. The pupils will require much practice in *problematic* arithmetic of various kinds. Questions—not necessarily intricate ones—should be worked about joint and separate labour by the day and hour; the discharge and filling of pipes; clock sums; motion round a circle and on parallel lines; about trains, rowing, running and walking matches, etc.

Cards should be used as a Test only.—Text-books and test-cards are useful in their place. The former may be bought by the elder scholars for home-lessons, or utilised to fill up the time of forward children in school. The latter are useful as *tests* only; it is a lazy device to use them continually. Nothing can possibly make up for skilful demonstration and the contact of the teacher's mind with that of the children.

Trusting to cards and books is the cause of most of the failures in Standards VI. and VII. at examinations. The dismayed but careless teacher says—"Why, they have worked far more difficult sums than these." True; but how? By some mechanical process which failed them in the hour of need—owing partly to their want of confidence in their own methods.

And lastly, let it be impressed on the teachers of these elder scholars, how important it is to give them regular practice in expeditious and intelligent methods of working the

simpler rules—bearing in mind that it is *general* arithmetic and not stocks and averages, which will be of practical service to them through life.

When a boy of thirteen is seen to work addition and multiplication by the same childish method first taught him, it proves that there must be something seriously defective in the system pursued.

The Metric System.—As the scholars in Standards V., VI., and VII. are expected to have a practical knowledge of the advantages of the metric system, it may be advisable to say a few words here on these advantages.

In the first place, the substitution of this for the English system of coins, weights and measures would much simplify and lighten the labour of all arithmetical operations which involve buying and selling, weighing and measuring. At present much time, which might be advantageously employed in learning other subjects, has to be spent in becoming familiar with our complicated arithmetical tables, which contain *units* expressed by the various numbers 2, 3, 4, $5\frac{1}{2}$, 6, 8, 10, 12, etc. Thus: 2 pints=1 quart, 3 feet=1 yard, 4 farthings=1*d.*, $5\frac{1}{2}$ yards=1 pole, 6 feet=1 fathom.

But in the metric system only one basis is used, viz., 10. This is the same as that employed in the ordinary abstract and concrete modes of numeration and notation. Consequently to pass from one denomination to another only involves using the customary notation, or moving a dot to the left or right : whereas, in our cumbrous English system, there is often much multiplying required, and various troublesome remainders to account for. Not only are our money, weight, and measure systems very different from those of other nations, but the two latter vary somewhat even in different parts of our own country.

Advantages to Commerce.—The metric system would be a gain both to commerce and science. It cannot be

disputed that the adoption of a uniform decimal coinage, would much simplify the commercial transactions between nations.

Advantages in Science.—In scientific calculations, the metric system has already been largely introduced, and so the value of weights and measures mentioned in works on science are easily comprehended, without the necessity of changing them into those of the different countries in which the books may be read.

At present the settlement of accounts between merchants and traders residing in various parts of Europe and America, gives rise to much inconvenience, not only in deciding the precise value of the various coins, but also the exact equivalents of the different weights and measures used.

Moreover, in our present system, there is no kind of relation between the various ways of measuring and weighing, as there is in the *metric* system. The latter is of French invention, and takes its name from the *metre*—the *foundation unit* for all calculations relating to money, weight and measurement in France. The other units are the *are*, the *stere*, the *litre*, and the *gramme*. The English equivalents for all these ought to be learnt by the sixth and seventh standards, as the words *are of no use in themselves*. All can perceive the troublesome nature of the calculations which are now needed to pass from French to English or from English to French measures and weights. The difficulty is not lessened when other countries are taken into account; whereas if the metric system—which is the only *natural* one—were universally adopted, all confusion and trouble would disappear, and much valuable time be saved. The main difficulty in the introduction of this system would be that, while the change was going on, both it and that of the country itself would have to be used.

(N.B.—The use of the metric system in this country was made legal in 1864.)

ARITHMETIC FOR STANDARDS VI. & VII.

Course.	Vulgar Fractions.	Decimal Fractions.*	Proportion, Simple and Compound.	Interest.	Extra Work for Stand. VII. Averages, Per Centages, Stocks.
I.	(*a*) Proper and improper fractions. (*b*) L.C.M, and G.C.M. and their uses. (*c*) Addition and subtractn.	(*a*) Vul. fract. with denmrs. 10, 100, 1000, etc., as dec. (*b*) Express dec. as vul. f. in lowest terms. (*c*) Add. and sub. of deci.	(*a*) The nature of ratio and proportion. (*b*) Finding the 1st, 2nd, 3rd or 4th terms of a prop. (*c*) Questns. stated, without reduction.	(*a*) Rate per cent. without reference to time. (*b*) Simple int. for 1 year. (*c*) Simple int. for any number of months.	(*a*) Average of numbers, ages, etc. (*b*) Percentage of school, population, etc. (*c*) The purchase of stock with cash.
II.	(*a*) Mult. and div. of fractions by a whole numb. (*b*) Mlt. and div. of a whole numb. by a fraction. (*c*) Promiscuous ex. on all preceding.	(*a*) Mult. of decimals. (*b*) Division of decimals. (*c*) Promiscuous ex. on all the preceding.	(*a*) Reduction in 3rd term only. (*b*) Reduction in 1st term only. (*c*) Reduction in 2nd term only.	(*a*) Amt. and int. for 1 year, 2 years, 3 years, etc. (*b*) Amt. of int. for 1 month, 2 mths., 3 mths., etc. (*c*) Promiscuous ex. on all the preceding.	(*a*) Av. of sums of money and of vul. fractions. (*b*) Insce., brokerage, commission, premium. (*c*) The sale of stock for cash.
III.	(*a*) Mult. of fractions by fractions. (*b*) Division of fractions by fractions. (*c*) Mixture of add. and sub.	(*a*) Reducing vul. fracts. to a decimal form. (*b*) Add. and sub. of decimals, mixed. (*c*) Mult. and div. of decimals, mixed.	(*a*) Reduction in 1st and 2nd terms. (*b*) Reductn. in three terms. (*c*) All terms in money.	(*a*) Amt. and int. for years and months. (*b*) Amt. of int. for any number of days. (*c*) Amt. and int. for years and days.	(*a*) Average of weights and measures and of decimal fractions. (*b*) Profit and loss. (*c*) The income derived from *Stock*.
IV.	(*a*) Easy complex fractions. (*b*) Finding fractl. values of money and avoir. wgt. (*c*) Problems involving vulgar fractions.	(*a*) Mixed vulgar fractions and decimals. (*b*) Finding decimal values of money and avoir. (*c*) Problems involving decimals.	(*a*) Questions stated, with fractions. (*b*) Compnd. proportion by statement—easy.	(*a*) Find time when rate, prin., int. are given. (*b*) Find time when rate, amt., prin. are given. (*c*) Find princpl. when rate, amt., time are given.	(*a*) Miscellan. questions in simple and comp. rules (*b*) Disc. and present worth for 1, 2, 3, etc., years. (*c*) The income on *Cash*.
V.	(*a*) Complex fractions. (*b*) Reduce one quantity to the fraction of another. (*c*) Problems involving vulgar fractions.	(*a*) Mixed vulgar fractions and decimals. (*b*) Reducing one quantity to the deci. of another. (*c*) Problems involving decimals.	(*a*) Compnd. proportion by statement. (*b*) By Unitary Method.	(*a*) Find the rate when amt. prin., time are given. (*b*) Find the rate when int., prin., time are given. (*c*) Mixed ex. on Courses I. II., III.	(*a*) Miscellan. questions in simple and comp. rules (*b*) Disc. and present worth for months and days. (*c*) *Cash* to be invested to obtain an income.
VI.	(*a*) Complex fractions. (*b*) Reduction of fractions (weights and meas.) (*c*) Problems involving vulgar fractions.	(*a*) General ex. on Courses I., II., III. (*b*) Reduction of decimals (weights and meas.) (*c*) Problems involving decimals.	(*a*) Proportion with one decimal. (*b*) Proportion with two decimals. (*c*) Unitary problems with fractions.	(*a*) Interest with decimal coinage. (*b*) Promisc. ex. on Courses IV. and V. (*c*) Interest generally.	(*a*) Miscellan. questions in simple and comp. rules (*b*) Miscellaneous questions on per centages. (*c*) Reinvestment — Alteration in income.

* For *Boys* decimal fractions must include *circulating* as well as ordinary decimals.

Supplementary Work.—I. (*a*) Multiples and Sub-multiples of *gramme, litre, metre, are, stere.* (*b*) Reduction. (*c*) The four rules. (*d*) Passing from English to French Systems and *vice versa*. (*e*) Mixed questions.

" " II. The children of these standards should be occasionally practised as to *speed* and *accuracy* in addition of money.

" " III. Boys should receive some instruction about the mensuration of fields, circles, and cubes.

Having now gone through the work required in the various standards, we would add one or two hints that will be found useful.

Correction of Sums.—The examination of arithmetic is very necessary. As much as possible should be done by passing round while the scholars are at work, and—for the rest—the sums should be shown at the end. Arithmetic given for home lessons must invariably be corrected, and those sums which are wrong done over again.

The working of sums should never be erased (nor working on scrap-paper allowed), since it is most desirable that the teacher should notice errors, lengthy methods, and untidy work.

Teach all New or Imperfectly-known Rules on a System:—

(1) Explain the rule in few words.

(2) Give easy mental examples.

(3) Work simple sums on the blackboard, making the children keep pace with you.

(4) Give the forward children a sheet of sums to work from.

(5) Call out the backward ones or place them in front, and continue to work with them on the board till they understand the method.

(6) See that every child understands the working of a rule or problem. If one is passed over, that child will only give double trouble in the future. Employ some of the sharp scholars to help the dull ones.

(7) Keep a keen look-out that no one copies. If you suspect a child, call him out (without accusing him), and set him a sum of average difficulty on the board.

Analyze Problems.—The teaching of a new problem should invariably be prefaced by writing it on the board, reading it aloud, and ascertaining whether the scholars under-

stand the nature of the terms used, by asking them some such questions as these:—

What have we to find out? What information does the question give us? How must we set to work to find the answer?

Having helped the children to give satisfactory replies to these questions, the whole process should be gone through before them, and stated with the utmost precision, accompanied by careful arrangement.

Lastly, they should work *a number* of similar examples alone.

Mental Arithmetic.

In the Instructions to Inspectors, we read:—

> "The object of Mental Arithmetic is to encourage dexterity and quickness in dealing with figures, and to anticipate, by means of rapid and varied oral questions with small numbers, the longer problems which have afterwards to be worked out in writing. It is obvious that this general object cannot be attained if the exercises are confined to a few rules for computing dozens and scores. Oral practice should be given in all the ordinary processes of arithmetic, and should be so varied as to furnish as many different forms of exercise as possible in concrete as well as abstract numbers, and in the fractional parts of money, weights, and measures."

There could not be a better guide than the above directions for the teaching of the science of number mentally. It should cover the whole area of elementary arithmetic, lead up to every rule, prepare the way for each class of problem, and familiarise the children with countless difficulties almost before they have discovered that they *are* difficulties.

Mental Arithmetic Lessons should be Short.—It may be taken as one sure sign of a well-managed school and a skilful teacher, when mental exercises form part of the *daily* course in every standard. Too long a time at once

should never be devoted to this work, for, if the questioning is as lively and searching as it ought to be, it involves considerable mental strain. Ten minutes twice a day for the younger scholars, and fifteen minutes once a day for the elder ones, should be sufficient.

How Given.—The chief point to secure is that the exercises should be well graduated and *used systematically*. Every teacher should be supplied with a book of good, progressive, practical examples.

The particular book used matters little in comparison with the manner in which it is used. Young teachers have a bad habit of dipping, hap-hazard, into some collection of mental examples, and asking the children a few questions *à propos of nothing*.

This is mere waste of time, and, as we have urged repeatedly, every moment ought to be turned to account. The head-teacher should fix upon the page or leaflet to be taken each day or week, and have it diligently taught, with abundant recapitulation of back work, and the improvising of extra examples. There should be a weekly examination of what has been learned, at which the children should be questioned *in turn*, to ascertain that all have profited.

It has sometimes been urged that teachers should not ask questions from a book, but make them up on the spur of the moment. Those who make the assertion shew ignorance of the nature of this lesson. It is a science, and requires to be worked out with as much care and thought as any other. Accordingly, everyone should be supplied with examples on a well-arranged method, and learn by degrees to supplement these by similar examples of their own. It is not, however, till teachers have had some experience, that they can frame questions which will be of practical benefit; besides, there are few lessons that make such demands upon their dexterity and tact, or that prove so exhausting. This indeed is why so many yield to the temptation to neglect mental arithmetic,

and substitute for it the writing up of half-a-dozen neat-looking but purposeless sums upon the board.

Employ Scholars to Question.—It is first-rate practice for the more advanced scholars if they are allowed to frame a few simple questions of their own, and ask them of the class. No better test of their progress could be applied, and those who take pains and shew ability, might be rewarded by being allowed to question the class before the Head-master or the Managers.

Encourage the Dull Scholars.—Sharp children must not be allowed to monopolise the answering. Inexperienced teachers often are so delighted with the brilliant replies of a few, that they fail to notice that only half the class are attempting to make the calculations, while the rest merely look on either unconcernedly or hopelessly. This must not be tolerated; and the teacher ought not to consider her duty done, until she sees every child trying to take his share.

There are always some scholars who are dull or timid, and these must be encouraged by easy questions framed for their special benefit, the answers to which the teachers must be careful to take from them alone. By this kind encouragement they can often be induced to make at least some portion of the calculation required.

Concrete and Abstract Numbers.—Use concrete and abstract numbers alternately in the lower standards till the pupils have grasped the idea that "six" standing alone means six *of something*. They attain this knowledge far sooner than many educationists think possible, and when it is accomplished there is no need to add "nuts" "books," etc. As soon as children know the value of the different coins —and they may well know this practically before they are seven years old if taught by object lessons—the bulk of the questions put may well relate to money—the best form of concrete arithmetic, because the most practically useful.

Allow no Artificial Aids in Adding Figures.—*Never let children count on their fingers*, make marks on their slates, or use any similar device to assist them in adding up numbers. If once permitted to trust to these artificial supports, they will never learn to tot up figures with certainty. If thoroughly drilled in the addition tables, they will be as sure that 9 and 5 are 14, as that twice 7 are 14. If they manifest difficulty in adding numbers together at once, without doubt or hesitation, the arithmetic lesson should be interrupted and the time devoted to "Addition drill." It will be well spent.

Mental Arithmetic need not be wholly Oral — If difficulty is felt by the class in working the examples, the teacher should write a few on the board for their benefit. Also she should occasionally allow them the help of slate and pencil. This will not hold them back in acquiring power of rapid calculation—quite the reverse.

Tables.

The absolute necessity of thorough grounding in Tables has been so frequently insisted upon throughout this chapter, that it would appear as though little remained to be said on the subject. Nevertheless, let it be once more observed that the scholar who has a thorough knowledge of them possesses an immense advantage. Tables should never be said to any tune or with a peculiar inflection, but repeated in a steady, business-like manner, not too fast, but brightly, as though the children knew they said them well and delighted to shew it.

What Tables are to be Learned?—More than many persons think necessary, if the children are to be rendered quick and ready at calculation. Great stress is now laid by

the Department upon "long tots"—a difficult exercise for a child, and one that can only be accomplished by the almost daily use of addition drill. Of this there are several kinds.

(*a*) A very useful one is to advance by twos, threes, fours, etc., not always starting on the same number, *e.g.*—2 and 2 are 4; 4 and 2 are 6; 6 and 2 are 8. *Or* 3 and 2 are 5; 5 and 2 are 7. As the children gain experience, larger numbers should be used in the same manner. They will soon learn that—if 5 and 4 are 9, 25 and 4 must be 29.

(*b*) 2 and 1 are 3; 2 and 2 are 4; 2 and 3 are 5, etc.; 3 and 1 are 4; 3 and 2 are 5; 3 and 3 are 6, and so on.

(*c*) 2 and 3 are 5; 5 and 4 are 9; 9 and 5 are 14; 14 and 6 are 20.

(*d*) By starting on any given number, *e.g.*, 19, and adding another given number, *e.g.*, 13 up to 100. 19 and 13 are 32, and 13 are 45, and 13 are 58, and 13 are 71, and 13 are 84, and 13 are 97, and 13 are 110.*

Any teacher can write these tables on paper or linen for the use of her class. This saves the time that would be taken up by placing them on the blackboard.

There is not the smallest doubt that children exercised day by day in this manner will soon be distinguished for the ease and accuracy with which they execute "Long Addition." Subtraction drill can be worked in conjunction with addition when the children are sufficiently advanced.

Pence Tables, &c.—The ordinary farthings, pence, and shillings tables must now be learnt; then the weights and measures required by the Code. Next will come the pence table, combined with the multiplication table; *e.g*, five threes are 15—fifteen pence are one and three pence; five fours are 20—twenty pence are one and eight pence, etc., etc. This is most useful, and children always enjoy saying it.

In Standards III. and IV. the multiplication table up to 20

* Addition and other tables, printed in very large type, for class teaching, can be had at the Depot of the Education Union, 20, Harrow Road, London, W.

times should be learned, and the money table up to 2400 pence, progressing by fifties and hundreds after the first 250.

Problems.

"Problems," say many of H.M. Inspectors, "do not receive the attention they deserve, especially in girls' schools. It is true that many sums set for children of twelve or thirteen have been glaringly unsuited to students of such tender years; yet the inability of scholars in some country schools to grapple with a problem is even more pronounced in Standards III. and IV., where the questions are often well chosen, and demand only the exercise of a little thought and calculation.

That there must be some defect in the teaching, few will deny; but we believe that, to amend this, a little tact far more than skill is needed on the part of the school staff. They err through lack of that invaluable power of putting one's self in the child's place, which is the first need of the educationist.

Problems must be Simplified.—It will be found, on careful scrutiny, that many of the questions so greatly dreaded by the children are very simple matters after all. And, if they are but stripped of the wordiness, puzzling terms, and big numbers which encumber them, the scholar would at once perceive somewhat of their drift.

Problems should be taught Orally.—Mental arithmetic must lead up to the ordinary book-problems if they are to be understood. Accordingly, let every sum of the sort be worked orally, and *by the simplest process*, before the child's brain is bewildered by the elaborate questions to be met with in guides to arithmetic and test-cards. After much patient practice of this kind, it will be found that children of

average ability are not daunted by problems which are suited to their age and capacity, but will take an intelligent pleasure in thinking them out and solving them. It is not, of course, pretended that any amount of the most skilful preparation will enable a child to grasp the meaning of what is actually beyond his powers of comprehension, yet even then we may rest assured that earnest labour is never thrown away, and the teacher's conscientious effort to smooth the path for her pupils will bear fruit eventually.

Examples of Simplified Sums.—A great variety of these are given in the Guide to Mental Arithmetic published by the Education Union. We append here enough samples to illustrate our meaning, and to shew that teachers, with a little practice, may easily bring even intricate processes down to the level of the children's intellect.

(1) *Typical Sum.*—If 350 yards of a trench are dug by 55 men, how many would be required to dig 560 yards in the same time?

Lead up to this by asking some such questions as the following:—

If it took six boys an hour to cover some books, how many boys would be wanted to cover the same number in half-an-hour? How many to cover double the number?

If four girls made eight paper mats in one afternoon, how many could two girls have made? One girl? Eight girls?

If four men were a week in making a table, how long would two men have been in making it?

(2) *Typical Sum.*—A. left £1,770, of which one-third was to be given to B., and the balance in equal shares to C. and D. How much would each receive?

This could be shorn of all mystery for a young child if he were exercised orally, as follows:—

A boy divided 6*d.* among his sister and two brothers, giving his sister one-third and dividing the balance between his brothers. How much did he give to each?

A father had 24 walnuts for his four children. He gave John half, and divided the remainder between Eliza, Harry, and Mary. How many each?

(3) *Typical sum:*—What sum subtracted from 9960 will leave 2505? Here it is the big numbers which make the child unable to arrive at the meaning. Ask him—

What sum subtracted from 8 will leave 2? And he will perceive the process at once.

(4) *Typical sum:*—How many times will a wheel of 7-ft. 6-in. circumference turn round in going a distance of fifty miles?

If the teacher will take the trouble to procure a toy cart or bicycle, chalk a wheel, make it revolve once and shew the children by actual measurement that the space it traverses corresponds with its circumference, they will be able to do any number of similar sums with ease for the future.

(5) *Typical sum:*—In much the same way, sums, such as the following—"A post is buried one-half in the ground and there are 3-ft. above ground, what is its full length?"—can be made quite clear with a foot-rule half buried in a flower-pot.

(6) *Typical sum:*—If I spend £795 16*s.* 4*d.* in a year, how much is that a day?—may be rendered:—

If I pay 1*s.* 9*d.* a week for milk, how much is that a day?

Again, how many weary hours boys and girls puzzle over "interest sums" because they have no clear idea as to what the term "interest" means; while "5 per cent." not seldom remains an enigma to the end of their lives. Yet by some such questioning as that given below, simple interest may be made plain to the dullest:—

A man who wanted to borrow £1, went to a friend and said—"If you will lend me £1 for a year, I will return it at the end of that time along with 1*s.* for the loan of it." What would that shilling be? Interest.

How much would he have had to pay at the same rate of interest for £20. Answer 20*s.*; for £50, answer 50*s.*=£2 10*s.*; for £100, answer 100*s.* =£5. (5 per cent.)

Thus the children will have been led easily up to the too-often unmeaning term *five per cent.*—£5 for a hundred.

The same simplifying process can be gone through with great advantage with easy problematic questions in Standards III. and IV.

Catch Division Sums require to be led up to.—Such questions as the following are hardly fair for children of nine and ten, but they are often given. What sum must be multiplied by 76 to yield £58 10*s.* 6*d.*? or, what sum of money can be subtracted precisely 50 times from £706 10*s.*?

Here, as before, the only way to make children *understand* such sums is to ask similar questions, using very low figures; *e.g.*—

What sum must be multiplied by 2 to yield 12?

How many times can 3 be subtracted from 15, 21, 36? And by what process must it be done?

Common sense will tell us, that the more abstruse a problem is, the more need there is of labouring to bring it within the range of a young mind. The typical examples given above are comparatively easy, but those who know child-nature will readily understand what a source of perplexity they may prove to little scholars of ten or under.

Sums must be clearly stated.—As soon as the teacher has reason to believe that the children clearly understand the meaning of a problem, she should introduce a more difficult sum of the same character, and work it with them on the blackboard. If the mental work has been thoroughly done, the children will have no difficulty in finding the answer to problems which are *gradually* made more complex; but this is not all that will be required. A considerable amount of training will be needed before they can write a clear statement of a problem. Most children—even when the working is correct—will put down a confused mass of figures, out of which the answer must be picked; or, they will write down

little more than the answer, giving no clue to the method of working. If, however, they are trained from the beginning to shew up sums properly and to state them intelligently, it will save infinite trouble and *muddle* afterwards. Scholars should be trained to place the *working* of sums in the margin —leaving the centre of the paper clear for the accurate stating of the process.

We will conclude these hints for the *intelligent* treatment of problems, by urging teachers to be of good courage, and not be too ready to believe that this class of sum is beyond the capacity of the children. True, they may not accomplish the sums set at the examination; but, even then, the school will be thought better of than if the problems had not been attempted; for H.M. Inspectors are instructed thus:—"It will not be right to report that arithmetic has been *well* taught, unless the greater part of the scholars who are examined endeavour to work the problem (*i.e.*, not necessarily give a correct solution, but make an intelligent attempt at its solution)."

And withal, such teachers will have the testimony of a good conscience that they have done their best to cultivate and enlarge the children's powers of reflection, and have taught them the reason of certain rules, instead of training them to obtain answers by filling in a sort of *pattern* and following a mere mechanical routine.

CHAPTER XI.

Object Lessons.

IT is generally allowed, that one main purpose of early education should be to train children in good habits—moral, mental and religious—by directing their superfluous activity into suitable channels, and guiding aright their powers of attention and reflection. This training, to be truly effective, must aim beyond the mere lesson of the moment. The intention must be, not so much to fill the mind with a number of facts, as to produce habits of reasoning and observation—to lead the learners to notice, and to draw conclusions for themselves.

It is impossible to attach too much importance to the cultivation, in early youth, of the observing faculties. Observation is only another name for patient, well-directed work, and all human power comes through its exercise. One excellent mode of training pupils in habits of thoughtful attention is to be found in a wisely-arranged series of object lessons.

Object Teaching not to be restricted to very Young Children.—For many years, all teaching of the kind was confined to the Infant School, and the elder pupils were entirely deprived of the solid benefit to be derived from such training. This was a grave error, and one which our Educational authorities are now seeking to retrieve; for, by recent Codes, object lessons are sanctioned for several standards of the boys' and girls' departments.

This Teaching more or less of a Failure.—As hitherto taught, object lessons have proved to a great degree

disappointing, the results not being such as might be reasonably looked for. To this failure, many causes have contributed, but we can only glance at a few of them:—

Absence of Consecutive Arrangement.—First, there has been too little order and sequence in the subjects chosen. Young scholars are not readily interested when instruction is of a fragmentary character. Yet, how often have the materials for such lessons been chosen at random. For instance, children have been taught one week about sugar, the next about crocodiles, and on a third occasion about silk. Very rarely were they told beforehand what the lesson was to be upon, in order that their interest and curiosity might be a little excited on the matter. Indeed, occasionally it happened that the teacher omitted to tell them, *at the time*, the subject of the lesson, and perchance this was half over before they had more than a dim perception of its purport. Again, when object lessons bear no relation to each other, there is the superadded evil, that recapitulation of former instruction becomes almost impossible.*

Lessons too Infrequent.—One lesson each week has been considered by many teachers an ample allowance, whereas children of six and seven years of age would profit greatly by *daily* instruction of the kind. The lessons would possibly in this case be shorter and less elaborate, but this might be a decided advantage.

No Objects Exhibited.—It is a fact, though very difficult of belief, that hundreds of so-termed object lessons have been given without the aid of pictures or other objects. The absurdity of this is self-evident; as well attempt to give a lesson on the piano without an instrument!

As its name implies, the chief purpose of an *object* lesson is

*Interest in the coming lesson may be stimulated by the simple plan of placing the specimen or picture before the class the day before. Most children would study it attentively if told—"To-morrow you shall have a lesson upon this."

to lead the scholars to form correct ideas of things that are evident to the senses. Accordingly, if the impression made is wanting in clearness and precision, and the image produced in the child's mind is misty and confused, the first aim of the instruction has been missed. Can any fruit, then, be expected from a lesson in which *nothing* substantial is offered to the notice of the pupil, and the teacher trusts only to laboured and heavy verbal description.

Specimens and pictures should be liberally provided. In some cases it is possible to exhibit a genuine sample of the object under consideration; this the children should be allowed to handle and examine, and have long enough under their notice to form accurate notions as to its nature. When specimens cannot be procured, good models or pictures must be furnished.

The value of good pictures can hardly be placed too high.

To begin with, let us consider that thousands of children depend entirely upon pictures for their notions about many wonderful things, belonging to animal and plant life, which inspire young people with intense interest. How could a child possibly form any adequate conception of a camel, a palm tree, or a boa-constrictor, unless his imagination were stimulated by a spirited illustration?

Even when a natural specimen can be exhibited, it is often nearly worthless, save when accompanied by a pictorial representation. For example—a cotton-pod, or piece of sugar-cane would afford but a sorry idea of the cultivation of these productions, unless supplemented by pictures of the growing cotton plant, and the sugar plantation. An ostrich egg or piece of sealskin might, indeed, be displayed, but these would avail little apart from pictures of the ostrich and seal themselves.

The Specimens shewn should be Appropriate.—It is not possible to take too much pains to procure a varied collection of specimens—provided that they fall within

the limits of propriety and common sense. Those limits would, however, be over-stepped, should teachers follow the advice of some enthusiasts who advocate introducing, into the schoolroom, live-stock—such as poultry, ducks and geese, guinea-pigs, frogs, rats, etc. Nor can the dissection of dead animals be regarded as aught but a coarse and unsuitable spectacle for school-children; the slight additional exactitude gained by such an exhibition would be dearly purchased at the expense of delicate and refined feeling.*

It is not necessary that objects used for illustration should be of a rare and costly nature. As an example, we may observe that there is no better or more interesting way of arousing the children's interest in that great mystery of nature —plant propagation—than by providing a box of earth and sowing grains or beans therein (at intervals of two or three days), and afterwards exhibiting them in their various stages of growth.

The Substance of the Lesson Neglected.—Herein lies another cause of failure. Those who have listened while object lessons of a certain class have been given, must have noticed that the main portion of the instruction has often been omitted. The teacher has been so occupied in describing the properties of the object in question, that nothing has been said respecting the thing itself. A dozen or more terms having been paraded and laboriously instilled—consisting of difficult words which find no place in a child's vocabulary—the instruction has ended, leaving the class as ignorant as they were at the beginning, except for a little language-teaching of a valueless description.

Of what interest or advantage can it be to a little child to learn that such and such articles are ductile, malleable, friable, translucent, absorbent, combustible, flexible, tough, solid

*No objection could be made to the borrowing of a globe of gold fish, wherewith to illustrate the movements of the gills and fins, which are not visible in a model or picture. A school aquarium also supplies much interesting and instructive matter for lessons on animal and plant life.

or opaque? (The last-named is a favourite adjective—being a *safe* term to apply to most objects.) Then, will not a little reflection surely shew teachers, that, if an object lesson is not a suitable occasion for adding to the children's stock of adjectives, it is even less allowable to turn it into a spelling lesson? On the contrary, the grand aim and purpose of such teaching ought to be kept distinctly in view, and all instruction that is more suited to a reading-lesson, sedulously excluded. Any description of the subject under consideration should be elicited, when possible, from the children themselves, and given *in their own language*. To put unnatural and often abstruse expressions into the scholars' mouths, then write the words on the blackboard and have them repeated and spelt over and over again, is a deplorable mis-use of the hour which the time-table proclaims is given up to "Object Teaching."

The Power of Observation to be Trained.—The careful directing of the children's attention is the principal end of object teaching, and this is doubtless the first step towards the production of those skilled artizans for whom there is so great a demand at the present time—men who can introduce into their work somewhat of original thought and design. Only through *early* and systematic training of the senses, will our scholars learn to be on the look-out for what is new and remarkable, and to discern what would remain completely hidden from an uneducated eye.

Our best educationists have persistently pointed out that to foster the power of observation is the main function of object teaching; yet, notwithstanding this, how many schoolmasters and schoolmistresses continue to *lecture* and *harangue* their pupils—instead of *teaching* them; *telling* them facts which they might and should discover for themselves, and, in short, impeding the development of those habits of discrimination which are of so much more value than the actual information conveyed!

Let such teachers bear in mind that even young children

are capable of thoroughly studying objects suited to their comprehension, and that the habit they acquire at school of concentrating their mind on what is presented to their notice, will be readily extended by-and-bye to other things which they will meet with in their daily life, and thus lead on to important results in the future.

Trying to put Old Eyes into Young Heads.—This pernicious mistake has to answer for a great deal of the weariness that youthful learners experience during many lessons upon natural objects, which might otherwise be rendered delightful to them. Teachers, or rather the authors of the books from which they collect their facts, expect the little folks to see objects with *their eyes*, though the latter, perhaps, first opened to the light forty or fifty years ago. In many excellent and charming publications written for children by naturalists and others, we find the young readers called on to note facts which, though, no doubt full of surpassing interest for men of science, are yet utterly devoid of attraction for a child of ten or eleven. For example, in a little book on "The Human Body," written for very young children, the author exclaims—"I hope, dear children, that you have often thought and wondered about the reflex action of the nerves!"

It will be a happy day for the children in our schools when elderly ladies and gentlemen leave off seeking to adjust their spectacles to the bright eyes of the young, and try to recollect *what* it was that used to rouse interest in their own minds, before they had reached their teens.

System Essential.—In the treatment of an object lesson, system and order are essential. The method adopted will naturally vary with the subject, and the age of the scholars. For very young children, it is generally sufficient to deal with form, colour, parts, and practical uses. For the next grade, the different stages of growth, or preparation, may be added; whilst a still higher course, besides the foregoing particulars,

may include the tracing of cause and effect, and also historical particulars and statistics.

There must, too, be system in the way the scholars are trained to notice. We will suppose that the lesson is upon some wild animal, a picture of which is, for the first time, shewn them. If left to themselves, they will probably dismiss the matter with a hasty and cursory glance; but they may easily be trained to study its most striking characteristics in their proper order. The connection of one part with another may then be pointed out, and afterwards the animal considered as a whole.

Let it be again and again impressed on those to whom the giving of these lessons is entrusted, that something more is desirable than simply to thrust knowledge upon the children. There are few lessons of the kind in which they may not have the pleasure and profit of finding out something for themselves; though it is to be feared that many teachers are apt to forget this.

Proceed from the Known to the Unknown.—First lessons in object teaching should tend to fix the attention upon what is already known in a certain degree (continually seen, yet perhaps hardly noticed), and to shew—in these common and possibly despised things—fresh interests, and properties hitherto unsuspected. This, when done in an original and striking way, will often seem like a revelation to the young learners; and if the links that connect these common things with others that are unfamiliar, can be plainly shewn, the way is being prepared for the whole universe to become one great lesson-book. Of all modes for quickening the intelligence of children this is indisputably the best, although there are others which must on no account be neglected.

It is not enough to tell children of the existence of something unknown to them, they should be taught in what relation it stands to things with which they are conversant,

and led to discriminate between them, and to notice at what points they approach to, or diverge from, each other. The comparing of two things plainly implies an adequate knowledge of both of them. This is important to keep in mind.

Teachers of the present day are apt to commit themselves to one of two extremes. Either they persistently ignore the truth, so ably set forth by Commenius three hundred years ago, that any knowledge imparted should advance, when practicable, from the known to the unknown; or, in their zeal for this doctrine, they omit altogether to bestow fresh information. Now, taking into consideration the class of children attending our schools, it is not easy to say which of the two is the more grievous error.

Though it is wise and right to begin with things known, we injure our children if we restrict them to the microscopic examination of—say, a cat, a dog, or a sparrow, and leave them in profound ignorance of the great carnivora, the shark, the whale, the condor, eagle, stork, and the numberless strange and interesting creatures that inhabit this globe. While it is undeniable that "Knowledge, like charity, should begin at home," it is a gross abuse when either one or the other is made to end there.

Again, it is clear that there are numerous subjects which cannot be led up to. What are teachers to do here? Is the pupil to be left in entire ignorance of such matters? Not so; careful instruction respecting them must be given after the "Declaratory mode."

To make a discreet choice between these two systems; to know how to stretch the one to its fair limits and deepen impressions already made, and then fall back upon the other so effectively that the child can picture to himself the unknown fact or thing, and lay hold of it with his imagination or intelligence, is no slight test of a teacher's capacity.

Above all, let Dulness be Avoided.—Lastly, let a few words be said on the over-formality and wordiness which

crush the very life out of so much otherwise admirable instruction. It is no wonder that many young teachers should shrink from giving these lessons, if they consider it necessary to encumber themselves with headings, divisions and subdivisions, technical expressions, and Latin words, till their teaching becomes insufferably dull, heavy, and spiritless.

The subject-matter of object teaching is so interesting that it ought *naturally* to secure the attention of the learners. When, therefore, teachers find that interest is flagging, they may be assured the fault lies with themselves, and must be prompt to change the form in which they are presenting knowledge to the class.

What our scholars want are lessons which are at once more simple and more frequent, arranged in consecutive order, yet covering a wider area, and given with more thought about the class, and less about the teacher's style and diction and the precise framework upon which the lesson is constructed.

By all means, let the younger teachers be trained to draw up detailed and methodical "notes"; they cannot have too much practice of the kind. But, when engaged in actual teaching, they should try to forget these artificial helps, and speak in as simple, natural, and *interesting* a manner as they can. There would be less show about such teaching than about a few elaborately got-up lessons, given in polished and pedantic language; but it would be solid, and adapted to child-nature, and consequently, in the end, satisfactory.

Not an Easy Branch of Education.—It must be owned that object teaching is attended with peculiar difficulties. Inexperienced teachers are often sorely perplexed by finding themselves stopped at every point. Speaking, for instance, of the composition of glass, they encounter entire ignorance of the nature of potash; or, referring to the manner in which fishes breathe, they discover that their pupils know nothing about their own organs of respiration. If they keep to what is known, they seem to be moving in a weary and

confined circle; if they launch out into the unknown, it soon becomes apparent that they are out of the children's depth.

The truth is, that, in such teaching, foresight and a definite plan of action are peculiarly requisite. Desultoriness must be eschewed, and infinite pains taken to map out a wisely-chosen set of lessons which shall bear some real relation to each other.

The scope and limit of every lesson should be arranged beforehand, and this limit, as a general rule, adhered to—the teacher avoiding the temptation to make digressions by wandering down bye-paths that look attractive at the moment.

We have suggested no *scheme* of object teaching, but it seems the most rational plan to be guided by the great divisions of Nature, and give courses of fundamental lessons on the animal, vegetable, and mineral kingdoms; then, upon this basis, to build up other instruction in natural history, etc. If the rudimentary lessons were repeated four or five times during the year's course, we should at least ensure our children knowing something about the classification, structure, and habits of animals generally, and the developments of plant life. This would give them a love of nature and a healthy desire to know more of her mysteries, and fit them to read more advanced works on the subject, later on. The study of nature—of trees, flowers, animals, and the forms of earth, has always been found to stimulate thought, and fill the mind with ideas that are pure, beautiful, and true.

For elder pupils, object teaching may be so framed as to touch upon physics, heat, light, motion, &c.; but it certainly would appear wiser to treat these subjects in separate lessons when this is feasible, than to introduce them into those described above.

CHAPTER XII.

Science Teaching.

THE series of object lessons given in the lower standards should prepare the way for, and lead up to the teaching of elementary science, in the upper divisions of the school. A long and imposing list of specific subjects now appears in the Code—from which a selection may be made. It is of real consequence that teachers and managers should regard these "specifics" with a favourable eye, and allow the children under their care to benefit by them, whenever possible.

Advantages of Science to the Student.—There are few children that remain at school till the sixth standard is passed, who would not be benefited by learning the principles of, at least, one science. Such study trains the perceptive faculties, cultivates a habit of keen and careful observation, teaches the value of well-weighed evidence, and exercises the learner in patient investigation and the valuable qualities of accuracy of thought and precision of statement. Much might be said, too, of the pleasurable and legitimate curiosity excited by the unfolding of many secrets of nature which ought to possess interest for every denizen of this earth.

Nor must the interest and brightness which science-teaching brings into the schoolroom be forgotten. How mistaken was the old idea that because the school-life of children of the working-class was brief, it could be turned to the best account by restricting them to the study of the Three R.'s—thus ensuring solid, *thorough* teaching! There was something plausible about this style of reasoning; and, to those ignorant of child-nature, the plea for *thoroughness* was unanswerable.

Yet the argument was fallacious in more ways than we have time to notice here. For one thing, it is not possible for scholars under fourteen to master even reading, writing, and arithmetic *perfectly;* and, secondly, a child advances far more quickly and surely in the direction of thoroughness, when his education is more varied and interesting. The attempt to keep him within a narrow circle of study has disastrous consequences; it can but lead to weariness and senseless rote-work, and at last induce positive hatred of learning.

To what deadly, dreary monotony have not poor children in the past been condemned, in thousands of the State schools, under pretext of giving them "simple, suitable, and solid" teaching. The same copybooks written and re-written; the same Readers read morning and afternoon till they could be repeated by heart; the same dull, incomprehensible sums (those prescribed for that particular standard only). This exhilarating instruction, forced upon the poor little scholars, year out and year in, was certainly eminently calculated to foster a love of learning for its own sake!

Things are better now. But there are still whole districts where but a very small percentage of the schools take a *Specific;* and there is always danger lest the teacher forget that monotony is one of the worst foes to real education, and that pupils may suffer cruelly unless every legitimate means of introducing variety and movement is made the most of. It is likewise perfectly true that the intricacies presented by one subject can often be only overcome by the study of some other. The worst possible way of trying to make a pupil surmount his difficulties and dislikes, is to keep him standing still and looking at them.

Not less Important from a Practical Point of View.—Science is not merely valuable as a means of promoting intellectual growth; it is also of immense practical value. Not only do chemistry, physiology, botany, etc., form an indispensable introduction to many trades and professions;

but there are few persons to whom an acquaintance with one or more of these subjects would not prove of service as they journey through life.

Further, the importance of science in its relation to the industries, manufactures, and commerce of this country must be realised. Our readers need hardly be reminded that a very keen competition is now going on between England and other nations with respect to various manufactures and products of skilled labour, and that we are often worsted in the contest. Germany, France, Belgium and America give more prominence than we do to technical education as a sequel to that of the elementary school, and a preliminary to the settled occupations of after-life.

In Germany, for example, the perfection of nearly every trade and handicraft is promoted by schools and guilds, fostered more or less by "the powers that be"; and it generally transpires that those found taking the lead in factories, are not only "men of business," but also "men of science"—in their own special departments. They well understand the nature both of the material they use, and of the required machinery; consequently, excellent work is turned out at a cheaper rate, and the English producer is often undersold. This occurs not only in manufactured goods of various kinds, but also with regard to agriculture, dairy-produce, and fruit-growing.

As one example, we may observe that, though Denmark is a country no bigger than the province of Munster, it yet has started 1,600 creameries, encouraged by the Government, and conducted on approved principles. It is only quite recently that the British public have begun to realise the necessity of taking similar steps to prevent the ruin of several departments of industry.

In the light of facts such as these, enlightened educationists will see that it is their duty and interest to promote, directly and indirectly, such scientific and technical instruction as the pupils of our primary schools are capable of bene-

fiting by. So acting, they will further not only education, but also commercial and national prosperity. It is asserted that there is serious danger of England losing the proud place she has hitherto held among the nations of the world, unless men can come forward possessed of experience and inventive talent; and, since it is the sapling, and not the full-grown tree, which is capable of being bent in the right direction, it is obvious that a bias in favour of scientific research ought to be given in the *Elementary* School.

The Instruction must be Adapted to Children.—The remarks already made on the treatment of object lessons, are generally applicable to science teaching. The latter may, indeed, be said to consist of lessons on *objects intimately related to each other*, with classification and nomenclature superadded —as far as is consistent with the capacities of *children*.

It is said that the science teaching in German Primary Schools is of a very simple and easy character, and forms the *basis* of that which a boy will have in a Secondary School—should his parents desire him to pursue his studies there. For this reason, the elementary teacher aims rather at developing a general taste for science than at giving detailed information.

It is indeed obvious that advanced science, which will promote technical training and ensure a supply of more intelligent and skilful workmen for the future, can hardly find a place in the time-tables of our State Schools. Yet it may safely be asserted, that those children who have gained some insight into scientific knowledge, will display a much greater aptitude for learning an art or trade, than others whose education has been neglected in this respect. Employers of labour have asserted that youths, who have enjoyed these advantages, learn in six weeks what others take six months to acquire.

Illustrations Indispensable.—If, for the successful giving of object lessons, pictures and specimens are necessary,

much more are they required for the teaching of most departments of science. Well-planned experiments by the instructor—and also by pupils of suitable age—are likewise needed for lessons in chemistry. However useful text-books may be, yet ocular proofs and demonstration are absolutely essential. Then, to insure the success of these experiments, teachers must prepare them with care, lest they perform them clumsily or fail in them altogether.

It is not required that the apparatus used should be expensive and complicated. The simplest will usually prove to be the best, and that which is home-made is sometimes superior to any other.

The Subjects Chosen.—As to which science-subjects are to be taught in a particular school, no invariable rule can be laid down. Often the preference will rightly be given to those which have some bearing on the trade, manufactures, or pursuits of the neighbourhood, or which seem most needed for practical purposes. Agriculture, for lads belonging to country districts; and chemistry, for those brought up in our great industrial centres, are among the most appropriate.

Drawing.—It is certain that dexterity in the use of the pencil is best gained in early youth, and it is not possible to overrate the importance of drawing to the industrial population of any civilized nation. With this remark we shall dismiss the subject of instruction in the Art of Design; for, as this is now happily made compulsory in boys' schools, its advance is assured.

Superficial Teaching.—The absurd and startling answers often made at examinations in chemistry, physiology, etc., prove the worthlessness of much of the instruction now received. Yet it does not follow that such instruction is intrinsically bad. It is frequently very ably given, and illustrated by means of expensive and elaborate apparatus. What, then, is amiss?

Two things, chiefly. First, the teaching is wrapped up in language which the children cannot understand. The lecturer discourses eloquently upon processes and operations, elements and bases, orders and classes, and the pupils look on in blank amazement, and wonder what it is all about.

Many teachers of twenty or thirty years' standing have not yet realised that words which represent familiar ideas to their minds have no meaning whatever for their pupils. Often, when they fondly imagine that they have begun at the very beginning, they are using terms which are mere empty sounds to their hearers. This is, at times, caused by a little vanity—teachers straining to express themselves in what they consider correct and well-chosen language. A laudable ambition, no doubt, but let them remember that no language can be accounted well-chosen, which is not suited to the comprehension of the listeners. It would really seem as though certain people go out of their way to find some hard term of Latin derivation, while a good Anglo-Saxon word is lying close at hand, which would be not only more intelligible, but far more appropriate to the subject; and—let it be added—in better taste.

Secondly, the very *ideas* sought to be conveyed are beyond the comprehension of children who have gone through no previous preparation. This fault is by no means peculiar to science teaching. We have remarked upon it already in connection with other branches of knowledge, but feel that it is hardly possible to say too much on a matter which is one great obstacle to any real progress in education. In all directions, theorists are to be found trying to thrust the ideas of their own mature minds upon minds which are passing through successive stages of growth. They totally ignore the fact that general formulas, which are simple enough to those who are acquainted with the whole group of truths these formulas gather up and represent, are a complete mystery to children who are still in ignorance of those truths.

It has been aptly said: "The ceaseless observation, inquiry,

and inference going on in a child's mind, and its acute remarks upon matters within the range of its faculties, prove that if these powers were brought to bear systematically upon studies *within its range*, they would be mastered without help. But we drag it away from facts in which it is interested, and substitute others far too complex for it to understand, and which are, therefore, distasteful. By thus denying the knowledge the child craves, and cramming it with what it cannot digest, we succeed in producing a thorough disgust for knowledge in general."

Simple Primers Needed.—The finished instruction now given by experts, in many of the larger elementary schools, requires to be *prepared for* by very plain teaching, such as children can both take in and assimilate. For this purpose, Science Primers, written on purpose to give the scholars of the *lower standards* some insight into easy facts concerning physiography, chemistry, and botany, are urgently needed. Probably the demand will, ere long, create a supply of such books; and, when this is so, we venture to express a hope that they will be taken in hand by *teachers*, not experts. By all means, let specialists revise and correct, but it is teachers only who understand the "Art of putting things" to children.

It is also much to be desired that the authors of these manuals of the future, will have the sense to steer clear of the quicksand of *simile* which has proved the grave of much instruction that might otherwise have borne good fruit. A *simile* which is *more hard of comprehension than the thing it professes to explain*, is an anomaly; but books for children are full of such anomalies. Let our readers investigate science primers for themselves, and judge whether or not our assertion is to the point. We have seen the idea of the corpuscles of the blood "simplified" for children by comparing them at one time to "a shoal of fish," at another to "a fleet of boats," and at a third to a "train of loaded wagons"; the diaphragm

termed "A faithful guardian that watches over us to our last sigh," and a gland compared—in the same book—to a *bag of silk* and a *factory*. The manual was, in other respects, admirably drawn up, but its usefulness was marred by the author's far-fetched attempts at comparison. Most of the object lesson books for elementary schools err in this respect. Their writers can have little conception of the confusion and perplexity into which they throw the childish mind by these singular "explanations." Yet what else can be the result of telling a class that an insect's body is like a railway-train, that "dough" (a substance with which every child is perfectly familiar) resembles "clay," and so forth?

Valueless Science Teaching.—We will end these brief remarks on the importance of entertaining practical views on this important branch of education, by a few words of warning respecting a sort of science-learning which obtains in certain quarters, but which is mere waste of time and energy. It consists in committing to memory strings of technical terms and rules, learning the Latin for what is much better said in English, and repeating classified names which to a child are mere jargon. We have before noticed the almost preternatural power possessed by young people of committing to memory what makes no sort of impression on the mind. Far better to let "specific subjects" alone, than to degrade them by such teaching as this; it will but create aversion in the very minds which it is desirable should receive a bent in the direction of true science.

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CHAPTER XIII.

Class Talks.

IF there is one point more than another in which the elementary schools of this country are found wanting, it is in imparting anything approaching *general knowledge* to the children who depend on them for all the refining or elevating influences they are likely to enjoy. In certain respects our Educational System is admirable, but it would be untrue to assert that the pupils who, year by year, leave our schoolrooms to take their place in the battle of life, are *well-informed* for children of their age.

No thoughtful person can study the code of laws which controls the education provided for the working-classes, without arriving at the conclusion that the children are condemned to learn too much of a few things, and little or nothing of many others which are of equal importance. It would really seem as though the maxim underlying our educational policy in the past was "All or nothing." In every subject that lies outside the domain of the three R.'s, our boys and girls must either be able to pass a searching and exhaustive examination, or they shall be precluded from knowing anything whatever about it:

A child of twelve shall either study physiology like a medical student, or be unable to distinguish between the lungs and the heart, the muscles and the joints:

He shall so learn botany as to be able to classify plants according to the scientific nomenclature of a professed botanist, or remain (unless he be country-bred) so densely ignorant of vegetable life, that he calls poppies and peonies roses, knows

not an oak from a poplar, and confounds the bark of a tree with its root—if, indeed, he knows of the existence of a root at all:

Unless chemistry is taught as a *specific*—with the accompaniment of a costly and cumbrous apparatus, the pupils must leave school completely devoid of the simplest knowledge respecting the composition of air and water, or the hidden forces of nature—yes, unable even to attach any meaning to such terms as a "solid, liquid, gas."

If agriculture is the "science taken," well and good! If not, even the brightest town-scholar knows no more of farming operations, crops and cattle, than if he had been brought up in a coal mine, or, like Caspar Hauser, at the bottom of a well.

Nay, further, it is no exaggeration to say that there are hundreds of town-born children who are so uninformed regarding the world they live in, that their most vivid conception of a sea or a lake is derived from the street puddle, and of a river from the foul gutter. Of such natural objects as mountains and hills, woods and forests, they have not the faintest idea; and the words which they meet with in their reading-books descriptive of these objects, are but so many empty sounds.

In some extreme cases, there is no familiarity even with fields and hedgerows. It will be urged that such gross darkness as this is not common. No, happily it is far from being the normal condition of children even of the poorest parentage; but—in degrees which vary according to circumstances—it is a sorrowful fact that the offspring of our labouring population grow up in a state of narrow-minded unintelligence which is truly deplorable.

We admit that each standard is well supplied with Readers which, in their general style, leave little to be desired, but the information they convey is of so fragmentary a character, and they are studied so much more with a view to acquiring correct orthography and pronunciation than general knowledge, that they count for little as aids to real education.

Main Defect of Elementary Teaching.—To put the matter briefly—the principal fault of the education provided for the masses of this country is its *narrowness*. Exaggerated attention is paid to a few favoured subjects, and often minute investigation is encouraged of certain objects, to the almost total exclusion of all others.

What is wanted is not so much learned instruction concerning a few topics, as a general cultivation of the child's intelligence, *as a whole*. One meaning of the term *Education* is to rear or edify, and there is a striking analogy between the erection of a material edifice and the building-up of mind and character by enlightened instruction. But what would be thought of an architect who should fix upon one corner of the house he was constructing, and insist upon its being completed in every detail, before even the foundations of the other parts were laid?

The farmer or gardener does not devote his efforts exclusively to three or four spots, but endeavours first to get the whole land under cultivation, and then to bring all gradually to perfection.

Without being advocates of what is termed a "smattering," we cannot but feel it a reproach to the primary schools of this great nation, that, boys and girls who have passed seven or eight years within their walls, should go forth knowing little or nothing of the history of the world—past and present—the progress of civilization and the discoveries and inventions due to it, the habits and customs of foreign nations, the beautiful in nature or art, and the thousand-and-one other matters which ought to possess interest for an Englishman.

American Education superior in this respect.—There may be many grave defects in the education provided gratis for young Americans; but it has at least this solid advantage over our own, that it gives the pupils a far better *all-round* knowledge of facts. It widens the range of their mental vision, and prepares the men of the future to

take interest in something higher than the chronicles of murder and divorce cases in their Sunday paper, and the results of the latest prize-fight.

Not long since there appeared, in a United States journal, a humorous account of a Board-school into which an American had "strayed while on a visit to England." Having obtained leave to address a few questions to the boys, he very naturally tried to ascertain their opinion of his own country. One query after another was put, to be met only by silence and blank looks. The lads were aware of the existence of America and could name its principal exports to England, but that was all. The master observed stiffly that geography was not "taken" in that school, and his visitor departed considerably mystified, and by no means favourably impressed with the "English system."

As a contrast to this, we may relate that our own countrymen, when travelling in America, have been astonished to find that even the surnames of our English bishops were well known to the educated American!

Surely there is a happy mean which might be struck between endeavouring to teach the children *everything about something*, and the equally erroneous aim of teaching them *something about everything*. Thoroughness and *depth* are greatly to be honoured, but there is such a thing as pushing a child into water so deep as to drown him.

The School must widen its Instruction.—Where can our rising generation obtain the extended training they need? In many instances the parents are too poor and hard-worked to do more than provide food and raiment for their offspring. There is no home library from which to borrow books, nor is the conversation at the hurriedly-snatched meals likely to be of an instructive character. It is clear, then, that *the school* ought to provide the child with that equipment of varied information, without which he will find himself at a serious disadvantage when grown to man's estate.

Here we must pause to admit thankfully that some effectual efforts have, of late years, been made by the Department in this direction. There has been an extension of the object-lesson system, and greater freedom of choice in specific subjects. But, grateful as all true educationists must be for this advance, it is not very far-reaching. Consequently, unless teachers can be roused to take up the matter zealously, much progress cannot be looked for, and inspectors will continue to be shocked at the scholars' profound ignorance of everything outside the sphere of the ordinary curriculum.

Conversational Teaching.—Among the means for developing the intelligence of the children of our primary schools, we rank very highly informal *Conversational Lessons*.

This chapter is headed "Class Talks," because, by these lessons, we desire to convey rather the idea of a parent conversing familarly with his children than of formal instruction. Not that these "chats" are intended to be conducted after a desultory, hap-hazard fashion. To be efficacious, they must be arranged upon a system, and each one as carefully planned and thought-out beforehand as any other lesson.

The *subject-matter* must be wisely chosen, the *arrangement* of parts must be consecutive and natural, the *method* adapted to the age and previous acquirements of the children, and the latter trained to draw their own conclusions and deductions. With advanced classes, besides encouraging conversational remarks, it may be wise to allow them to take a few notes at the time, and afterwards to write an abstract of all that has been brought to their notice.

Subjects for Class Talks.—These must be adapted to the age and circumstances of the pupils. They are to be found in such boundless variety, that it is not easy to make a selection which will prove *generally* useful.

Teachers should try to form an ideal of what an intelligent, well-informed child might be acquainted with to his own

profit and pleasure, and then try to bring the scholars under their care as near to that ideal as possible; and this no matter how poor or ignorant they may appear. Nay, the more sordid and unpromising are a child's surroundings, the more untiringly will a high-principled teacher labour to bring every gracious and ennobling influence to bear upon his life. Even the most indigent may possess exceptional talents, and surely the wise and good of all lands are agreed, that natural gifts should be cultivated to the utmost, and their possessors helped to rise to a position in which these gifts will have full scope.

The basis of a conversational lesson will frequently consist of a group of such objects as may be readily associated for the purpose. When possible, illustrations must, of course, be provided, but at times a single picture will suffice for the purpose, and there are many topics that will not admit of any such illustration.

The following subjects will be found to possess general interest for young people :—

(1) Human habitations—
 (*a*) Of civilized nations—from the shanty or log-hut to the castle and palace.
 (*b*) Of savage tribes—the Arab's tent, the Indian's wigwam, a Caffre-kraal, etc.
(2) Modes of travelling at home and abroad.
(3) Modes of travelling—ancient and modern.
(4) Bird architecture.
(5) Insect architecture.
(6) Foliage and bark of different trees.
(7) Bridges.
(8) Lighthouses.

For boys and girls of thirteen or fourteen, conversational instruction of a more advanced description will be appreciated; and their interest may be excited concerning :—

(1) Various styles of architecture.
(2) Ancient ruins of England.
(3) Ancient ruins of Rome.

(4) Different kinds of artificial light.
(5) Ancient coins.
(6) Some of the world's greatest poets (with portraits and specimens of their writings).
(7) Celebrated painters (illustrated by photographs of their chief works).

Laws of Health.—When physiology or hygiene are not taught formally, it is desirable that the elder scholars be made acquainted with the fundamental rules for preserving health, the eyesight, etc. It is of little if any use to know that the Latin for skull is *cranium*, for brain *cerebrum*, and so on; but it may save years of misery and discomfort to be taught, in early life, the guiding principles of hygiene, and the necessity that exists for temperance, ventilation, and physical exercise.

Does it appear to our readers that these class-talks are but "Object Lessons" under another name? Undoubtedly all instruction of the sort may be classified under the head of Oral Teaching, yet these "General Knowledge Lessons" differ widely from object lessons proper. Especially must it be noted that their *purpose* is wholly different. That of the object lesson is, chiefly, the quickening of the power to observe, and to draw conclusions. The function of the class-talk, on the contrary, is the supplying of information. We may venture to say that its aim is *Culture*—that is, if it be correct to define culture as—"The knowledge of all that is best worth knowing." To cultivate the child's sense and intelligence, to improve his taste and judgment, to open to him avenues of pure interest and enjoyment—this is the office of the conversational lesson.

The power of Rational Enjoyment.—It is not the least ambitious purpose of the class-talk, to aid in training the industrial classes of the community to take their pleasure rationally. The power to do this is one of the surest signs that the youth of a nation are being *educated;* it is proof positive that civilization and culture are advancing. But, alas! this sign is not, at present, characteristic of our countrymen

Much is now said and written about the desirability of throwing open art-galleries and museums to the working-man,

and also of allowing him more frequent opportunities of beholding the beautiful in nature and studying the treasures of literature. The movement is a just and a righteous one; yet these elevating influences would be thrown away upon the majority of our labour-brothers. To assure ourselves of this, we have but to note their demeanour when holiday-making. They shew little more appreciation of lovely scenery, the glorious treasures of art, or the curious and interesting specimens stored in our museums, than if they were stricken with blindness. How can they care for such objects when neither eyes nor mind have been trained by education to understand and value them?

The vagaries and vulgarities of the English public, when pleasure-taking, furnish fruitful material for the comic press; but they can only be a source of sorrow and regret to those who love their country and that great working-population which can boast of such sterling and admirable qualities, and which ought to play so important and responsible a part in the future of the British Empire.

Who can Remedy this?—Need we say that those who are answerable to God and man for combating this evil, are the powerful class to whom the education of the people is committed?

Not only are they called—if possible, with greater urgency than ever before—to lay deep the foundations of religious truth and rectitude in the hearts of their pupils; there is likewise much, very much, to be done in the way of mind-culture, before even the initial steps will have been taken towards fitting *the masses* to take up the dignified and honourable position on life's stage, to which—through various causes—they are now being summoned. By the extension of the suffrage alone, the position of the working-man has greatly changed; his power for good or evil has immensely increased. If only his educational advantages increase in equal ratio, the result will be eminently satisfactory.

As things are now (and leaving out of the question definite religious instruction) it is impossible to believe that the education given in elementary schools is fitting the pupils to find enjoyment, later on, in refined pursuits, or opening up a path to the intellectual stores of other ages, or pointing the way towards those sources of "sweetness and light" which exist even in this sad world for those who know where to seek them. Thankfully it is admitted, that, in the humbler walks of life, many are to be found with a keen appreciation of all that is beautiful and ennobling, but this cultivated taste is theirs—spite of their school-training, not as a consequence of it.

Drawing not Driving towards Knowledge.—It is a great art to know how to make the mind unfold of itself, and take in that new material which it can assimilate; and, in developing the natural powers of children's minds, and leading them to seek knowledge of their own free will, the class talk is exceedingly valuable. What a child learns only because he *must*, is not retained, but knowledge that is acquired pleasantly and willingly will be found again after many years. The teacher who allures and attracts her charges into the paths of knowledge is like the shepherd who goes before and leads his flock—not the dog, who only gets them on by barking and snapping from behind.

Advantages to the Teacher.—A class talk, properly conducted, brings the learner's mind into direct contact with that of the teacher, who will thereby be the better enabled to remove difficulties and throw light upon what was previously dark. More than anything else, it will tell the teacher something about the minds she has to educate, and so shew her plainly the kind of treatment they require. Among other disclosures, it will reveal depths of ignorance in her pupils of which she had not before the faintest conception; and this—not to overwhelm her with a kind of despair, but to incite her

to make brave, hopeful, and yet practical plans for the removal of that ignorance.

By all possible means Intelligence must be Fostered.—Conversational instruction, when freely and skilfully used, will undeniably be found of great assistance in opening the minds of the young, and extending their knowledge; but other means ought to be sedulously used.

Well-directed efforts must be made to encourage in our pupils a love of good literature. Besides having access to a school library and works of reference, the elder ones should be guided as to the purchase of periodicals adapted to their age and attainments, and—when very poor—these should be circulated among them gratuitously. Once a week, some interesting volume may be substituted for the ordinary readers, and a friendly chat allowed on a portion of what is read. There are few reading-lessons which might not profitably be closed with conversation. Should the subject be *geography*, how much supplementary information could, in this way, be given upon the peculiar features and customs that distinguish various countries. If *history* is the study of the hour, what lively and animated discussions may not take place upon the characters of the different personages mentioned, or the cause and consequence of the principal events! Let teachers but learn the art of successfully conversing with their classes, and they will find that it may be applied with advantage to many ends little dreamt of at first.

Difficulties in the Way of this Teaching.—The course of general instruction suggested in this chapter, will—we are well assured—seem all but impossible to many teachers.

(1) They will urge, with great show of reason, that the work exacted of the various standards is already so arduous, the attendance of the scholars so uncertain, that no margin is left for acquiring "accomplishments" such as we describe. Too true is it that there are difficulties in the way. So long as

one-fourth of a child's brief school-life must perforce be spent in *doing sums*, his true education will suffer — and suffer irreparably; and it will be a "venture of faith" to embark in teaching of a voluntary character. Yet, we pray all teachers to believe that, if they have but courage to make this venture, they will have their reward—not only in the testimony of a good conscience that they have done their best for those entrusted to their care, but in the pupils' greater aptitude for "studies of obligation."

(2) It may be objected that it would be impossible for even the best-informed teachers to be prepared with replies to all the questions the scholars might put.

When it happens that the teacher feels unable to supply information on some point raised, she must either promise to obtain it at the first opportunity, or direct the members of the class to undertake the search themselves. It is essential to this mode of teaching that no hindrance should be offered to legitimate inquiry. On the contrary, the teacher should gently stimulate that mental activity which is evinced by a laudable curiosity. Conversation should be unfettered, except by necessary restrictions, and *all* the pupils allowed to take their part in an easy, natural manner. So far as is possible, stiffness must be banished, and if the scholars appear shy and dull, they should be brightened by the introduction of a fitting anecdote or humorous description of some incident.

(3) It may be pleaded that the children of elementary schools are too young to profit by such training. We grant that for children below ten, or in schools clogged with those Half-time Bye-laws which are such a blot upon our civilization, the class-talks can hardly bear directly on culture, though they should by no means be omitted. But many boys and girls of from twelve to fourteen are now happily to be found in elementary schools, and the number of these would increase enormously if parents found they were taught more of what was of practical use. Such children may be

trained to take lively interest in anything that supplies them with a *new idea*.

General-information lessons have already been tried in some schools, and, it is no exaggeration to say, have been received with enthusiasm by the boys. The sight of a roll of pictures on their teacher's desk, as they enter school, indicating that diligence in the tasks prescribed by the time-table may probably be rewarded by a class-talk, incites the lads (especially the big fellows of thirteen and over) to work with all possible speed and diligence. Many anxious glances meanwhile stray towards the package of illustrations or specimens, and the question is sometimes hazarded: "Please, sir, would you mind telling us what it is going to be about?"

Two or three class-talks are given below as specimens, but no hard-and-fast lines can be laid down as to the method to be followed in this extension of elementary educational work. Teachers must, to a certain extent, follow the lead suggested by the children's remarks and questions. They must, however, be careful not to let the "talk" wander far from the matter under consideration. While leaving no remark unnoticed—unless it be thoughtless or flippant—they must lead back to the subject, if the children digress too widely. It must be recognised that this kind of teaching does not merely enable children to see and know what they could not otherwise discover; it teaches the orderly presentation of the points to be studied.

And, while class-talks afford an excellent opportunity for a wide and interesting review of a variety of subjects, they are chiefly valuable because they arouse interest, stimulate enquiry, create a taste for good reading, and help the learners to realise—in a measure—the greatness, diversity, and beauty of the universe—nature, art, science.

Best of all, they *enrich* the learners; for they lift the horizon and shew new lands to explore, new worlds for them to conquer.

Class Talks—CLOCKS.

TEACHER. Now, let us begin our class-talk. How long shall we have for it?

PUPILS. Half-an-hour; till the clock strikes four.

T. Yes, how convenient it is to have a clock in the room to tell us the time. We will take *clocks* for the subject of our "talk" to-day.

Have you ever thought how people managed before they were invented?

P. The sun told them the time. They knew when the sun rose it was morning, and when it set it was evening, and when high up in the sky it was mid-day.

T. Yes, but that would not tell them very exactly, would it? People who lived long, long ago must have wanted to know the hours more particularly than that, and so they set to work to find ways of marking the hours.

We read in the Bible about one of these ways. Can anyone remember what king it was who asked for the shadow to go backwards?

P. Oh, I remember, it was Hezekiah who asked that the shadow might go back ten degrees. We read about it a little while ago.

T. Yes, and he was King of Judah 712 B.C. That is the first time we ever read in history of something to measure time by. The earliest form of dial is believed to have been simply a column which cast a shadow of varying length and position.

P. But how did that mark the hours?

T. Probably certain of the hours were marked in some way on the ground. Afterwards a kind of dial-plate—a little like a clock-face—was made. On this figures were graven, and the shadow cast by means of a perpendicular piece of iron fixed upon the dial. Now, can you think how this shewed the time?

P. I suppose the shadow from this straight piece of iron was something like the hand of a clock, and pointed to the figures; if it was 12 o'clock to the figures 12, and if 4 o'clock to 4.

But that would not tell the minutes. It must have been like a clock with only the small hand.

T. Yes; it was many hundred years later before people learnt how to measure *minutes*. Even when clocks were invented they were for a long time called "horologes," a word which means "hour-tellers."

Now, try to think of another reason why something better than a sun-dial was needed.

P. You could only see it out-of-doors.

T. Any other reason?

P. Oh, I know, it did not tell the time at night.

T. Quite true; but did it always do so in the daytime?

P. No, only on bright sunny days.

T. This was, perhaps, why the ancients invented water-clocks, which they called "clepsydras." Some people think they were used in Egypt and China many years before sundials were thought of.

P. I wonder what they were like?

T. The first water-clocks were very simple. They consisted of a transparent vessel, something like a vase, on which the hours were marked. At the bottom was a very small hole, through which the water could escape gradually. The height of the water in the vessel shewed the hour.

P. That was rather a poor sort of concern. When you said it was a clock, I thought it would have been something like our clocks, and have wheels.

T. Soon after, a clever man, a native of Alexandria, invented an instrument in which water was made to fall, drop by drop, upon wheels. What would that cause the wheels to do?

P. To move. To go round and round.

T. Yes, and as they went round they moved a small rod that pointed to the hours, which were marked on a diagram.

P. That was a great improvement.

T. We must not forget one other way of measuring time. Hour-glasses. I will draw one on the board. (*Draws one.*)

P. I've seen one, only it was not an hour-glass. It was very small, and the sand ran out in three or four minutes.

T. That must have been an egg-boiler; meant just to show how long eggs should be boiled. Hour-glasses, of course, are much larger. I see there is someone longing to tell us of another kind of clock. Perhaps one which an English king made.

P. Yes, Alfred the Great's candle clock.

T. What can you tell us about it?

P. The candle lasted just eight hours, and was marked with coloured rings to tell the time.

(2) And he used to burn three in the twenty-four hours—one while he was asleep, one while he studied, and one while he looked after his kingdom.

T. Well, now we are getting nearer to the time when real clocks were invented. So many people have been said to be the inventors of wheel clocks that I cannot tell, for certain, who did at first find out how to make them.

The first we hear of in England was placed in an old clock tower which formerly stood opposite the gate of Westminster Hall. That was in 1288.

The second was put in Canterbury Cathedral, 1292. But these were brought from abroad. How do you think the English learnt to make clocks?

P. Perhaps they went abroad to learn.

T. They saw these clocks when they visited the Continent, and then

Edward III. invited three clever clockmakers to come from Belgium and pursue their trade in this country. Englishmen soon learnt how to make clocks for themselves, and they improved quickly, and made many curious kinds.

P. Were they very expensive then?

T. Indeed they were, and they could only be afforded for churches and large buildings. Still, by the end of the fourteenth century, few of these were without them. I am sure you would like to see some of the quaint old clocks.

P. Are any of them left?

T. Yes, at Wells, Exeter, or Peterborough Cathedrals you might see one. They are rather wonderful, for they tell astronomical facts as well as the time.

Thomas Wallingford, Abbot of S. Albans, was the first Englishman who made an astronomical clock.

P. What was it like?

T. It was very large, and shewed the minute, hour, day, and month at the same time. Then it also pointed out the revolutions of the sun, moon, and fixed stars, as well as the ebb and flow of the sea. When it was finished, Wallingford had to write a book of directions as to how it was to be wound up and kept in order, for fear the monks should spoil it.

P. What a clever man that Abbot must have been!

T. Do you remember where I told you the first clocks were made?

P. In Belgium and France; but I fancy we soon made better clocks than our teachers.

T. Oh, *they* did not stand still. Clever mechanics went on inventing and improving, and some marvellous clocks were constructed. The one at Strasburg Cathedral (made in 1570) is famous all the world over. Then, at Lyons Cathedral there is another nearly as wonderful.

Supposing we finish our class-talk to-day with the story of the clock of Lyons:—

When the clock strikes the hours, a door opens, two figures of men on horseback come out, encounter each other, and strike the hour with their iron mallets. Then they retire, another door opens, and the figure of the Virgin Mary, with the Holy Child in her arms, is seen; the Wise Men from the East come up and present their gifts, and a procession passes by.

This clock also tells about the sun, moon, stars, tides, and seasons.

The ignorant people of Lyons behaved very badly to their clever fellow-townsman. When he shewed them his work they were terrified, and thought an evil spirit must be inside the clock. So they broke it almost to pieces. But, although nearly heart-broken at seeing the labour of so many years destroyed, he set bravely to work to put it together again; and, by the time it was finished, the citizens of Lyons had grown older and wiser.

Now, listen, *our* clock is striking, and we must leave off.

WHY LAWS ARE MADE.

(For Young Children.)

TEACHER. To-day we are going to speak about the laws of our country. First, we must try to find out why laws are made.

Perhaps some of you can tell me about rules that your fathers and mothers have made for their boys and girls at home.

PUPILS. My father has made a rule that we shall all be in before dark.

Mine says we are to be punctual at meals. When William came late yesterday, father said, "Be off, you know the rule," and he had to eat his dinner in the kitchen.

Mother says that her rule is—"Never have idle hands." "Up in the morning early" is another.

T. Those are very good rules. Why do you think they were made?

P. To remind us to do right.

To save us from getting into trouble.

To keep us out of mischief.

T. Do all in this class have to keep these rules?

P. No, everyone has to keep his own home-rules.

T. Then we find that each family makes its own rules; and that, in a happy and well-ordered family, good rules are made and strictly kept. We might give these family rules another name and call them family *laws*.

When new children are admitted into the class, what is the first thing they are told to do?

P. To read the rules. Some of the rules are about order; some about punctuality; some about good conduct.

T. Yes; they teach you how to behave to your teachers and each other. Now give me the other name for school rules.

P. School laws.

T. What would happen if you were to break the rules?

P. We should lose our marks (place in class, etc.)

T. Suppose you *went on* breaking them, what then?

P. We should lose the prize or be punished in some other way.

T. And if anyone still persisted in breaking the rules?

P. He would, perhaps, be turned out of the school.

T. Then he would have lost something more valuable than a prize—his *character*. So, you see, if we want to be happy and get on well in school, there is something we have to be careful about. What is this?

P. We must take care to keep the school laws.

T. Can you tell me who made these laws?

P. The managers or the teachers.

T. I am going to write two rules on the board, and you shall tell me the use of them.

(1) All movements—such as crossing the room, opening or shutting doors and desks—to be made as quietly as possible.

(2) No pupil to open another's desk.

P. The first rule is made for the good of the class—to prevent interruption and disturbance.

The second is made for the benefit of each pupil in the class—to protect his property.

T. Now, try to understand this: Laws are made to prevent us from injuring others, and to prevent others from injuring us.

Did your father write down his rules?

P. No, father told us of them.

T. Why was it not necessary to write them down?

P. Because we all knew them.

T. Now, think, and tell me why it *is* necessary to have the school rules written? There are several answers.

P. Because new pupils come in who do not know them.

Because there are so many, that we might forget some.

If anyone begins to talk or make a noise, it is so easy to say—"It's against the rules, read them."

T. There is another reason. You know it is my duty to see that the rules are kept. Now, what would happen if I went away?

P. Another teacher would come.

T. Yes, and if the rules were not written up?

P. She would not know anything about them.

T. Could not the scholars tell her?

P. It would throw us back with our work.

T. And you might forget some of the rules, or you might by mistake put in some that were not there; then what would happen?

P. There might be arguing and disputing about it.

T. Therefore, to preserve peace and order, *written laws* are necessary. By-and-bye you will leave school and grow up to be men and women. Let us find out what laws you will have to keep then. If a man were to ride in a hansom and then refuse to pay his fare, what would happen?

P. The cabman would summon him before the magistrate and he would be *obliged* to pay.

T. Yes, the *law* would oblige him to pay. And suppose a man gave short weight or short measure?

P. Then the law could compel him to use right weights and measures, and to pay those people whom he had cheated.

T. There are many laws in England for the protection of the weak. These laws will not allow children to work in coal mines. They also compel masters to take all necessary care for the safety and welfare of their servants and work-people. They inflict punishment on those who are cruel to horses and other

dumb creatures. These are some of the best and most humane of our laws. Now repeat altogether—*The laws of the nation, as well as the laws of the family and school, are made to prevent our doing harm to others, and to prevent others doing harm to us.*

The laws of England uphold justice, mercy and truth; we should be proud of belonging to so well-governed a country. Can you tell any duty we owe to our country in this respect?

P. We must obey the laws ourselves.

T. If we do this, we may live in great peace and safety; for the Bible says—"The law is not a terror to well-doers but to evil-doers." When we speak in this manner of the law, what *law* do we mean?

P. The law of England.
The law of our country.
Our national law.

This elementary information should be followed up, on a subsequent occasion, with conversation upon the nature of the government under which we live and the laws we are called upon to obey, especially those which affect such every-day details as rent, taxes, rates, buying and selling, trespass, agreements, etc.

BRIDGES.

Pictures of various kinds of bridges—ancient and modern—should be provided.

TEACHER. We will begin to-day by seeing who can give the best definition of a bridge:

PUPILS. A roadway over a river.
An archway built across a stream.
A road across a river or valley.

T. I like the last answer best, because bridges now are built across valleys and roads quite as often as over rivers. Here *(shewing a picture)* is a very primitive kind of bridge; just the trunk of a tree thrown across from one bank to another.

P. That was all very well for a narrow stream, but stronger and more useful bridges must have been needed.

T. Yes, the next step, I think, was to prop up the bridge in the centre by means of a post planted in the middle of the river bed. But you will see at once why these wooden posts were not secure.

P. The water would rot the wood and make it give way.

T. And so even in very early times, stone was used for the piers which supported the structure. The Chinese seem to have been wonderfully skilful in bridge-building, but do you know which was the first nation to build stone bridges?

P. I expect the Romans.

T. Quite right; but what is your reason for thinking so?

P. They were the great road-makers, and as they always made their roads in long, perfectly straight lines, they must often have needed to carry them over rivers.

T. Yes, and the work of the Romans was always very strong and durable; so that we might quite have expected them to be the inventors of the stone bridge.

What is the most usual shape for bridges?

P. The arch—for stone bridges.

T. The Romans seem to have introduced and always to have made that form of bridge. The first arched stone bridge we read of was the Senator's Bridge at Rome, built 127 B.C.

P. Are any of the old Roman bridges still standing?

T. A few are, and there are extensive remains of several in Italy, France, Spain and Portugal. Can you tell me why we find them in these countries?

P. Because the Romans conquered them, and they taught the people how to build.

T. You are right; the Romans seem to have taught the art of bridge-building throughout Europe.

In the 12th century, a religious society was formed called "The Brethren of the Bridge." The object of their work was two-fold—to protect travellers, and repair and protect bridges. Tell me in what way rivers must be crossed when there is no bridge.

P. By boat.

Where the water is shallow travellers can ride across.

T. You mean that people must either be ferried across, or ford the stream. In old times, this exposed them to danger, as it gave robbers the opportunity of falling upon them. Then it was that "The Brethren of the Bridge" came to the rescue. One of the bridges built by them is still standing at Avignon; also a very noted one at Lyons, with twenty arches.

P. They knew how to build in olden days!

T. Yes, indeed. Now before we come to modern bridges, I think we ought to notice some more old ones. When I tell you that one town in Italy has three hundred and forty public bridges, I don't think you will have much difficulty in guessing the name!

P. Venice, of course.

T. Yes; but curiously enough, the Grand Canal (that forms the High Street of Venice) has only one bridge over it—called the Rialto. The original

bridge was made of wood; but this was destroyed by fire. The present one is built of marble, and has only *one* arch, 94 ft. wide, which spans the canal. Every stone-mason in Venice was employed in the work of building it, and the people at that time so little believed in the possibility of this wonderful one-arched bridge being ever finished, that they used to jeer at the architect and say—"When hens have teeth, the bridge will be finished." After the work was completed, the workmen carved these words upon a corner of the bridge.

Here is a picture of the Rialto.

P. Why, it looks like a street built across the canal.

Are those shops?

T. Yes, two rows of houses divide the bridge into three streets. The middle street is the principal one, and is full of jewellers' shops.

P. How curious! There are no bridges in England like that, are there?

T. No, not now; though on the Continent there are several.

Old London Bridge, which was finished in King John's reign, had houses on it. But we must leave the old bridges and come to modern times. The arched bridges made of stone, though they were used for so many hundred years, at length were superseded. Look at this view of the Tay Bridge, and compare it with our first picture of the trunk of a tree thrown across a stream.

P. There is no stone or wood about the Tay Bridge, is there? It seems built entirely of iron.

T. It is, with the exception of the foundations, which are of stone and concrete. Until the era of railways, stone was always used, but when skilful engineers found out what could be done with iron, bridges were first partly, and are now entirely built of it.

In 1878 an iron bridge was built over the Estuary of the Tay. It had taken six years to build, and cost £350,000.

The bridge was for a railway to pass over. Passengers from Aberdeen to Edinburgh could make the journey in two hours less time than before. Why was this?

P. They could cross the Estuary, and so make a short cut.

T. But, sad to say, about one year after the bridge was finished there was a violent hurricane of wind and rain one Sunday night. A train was crossing, when suddenly, without an instant's warning, the bridge fell, carrying the train into the raging waters below. Everything was washed away and 90 lives lost.

P. How terrible! surely no one ever tried to make another bridge in that dangerous place.

T. On the contrary, the railway company lost no time in arranging for another to be built.

P. Did they not choose a less exposed situation?

T. The old foundations had not given way, and the engineer first

proposed to use them again, which would have saved expense. It was decided, however, that it would be wiser to begin a new bridge 60-ft. below the former one.

P. Below! then it would be a still longer bridge than the first, for the Estuary of the Tay widens so rapidly.

T. It is. This bridge measures over 10,000-ft. It was first used for traffic at the Queen's Jubilee.

The Forth Bridge is even more remarkable on account of its height—the roadway along which the trains run being nearly as high as the top of the dome of St. Paul's Cathedral, while the highest part of the bridge is higher than the cross of St. Peter's, Rome. The first iron bridge was built over the Severn at Coalbrookdale, in 1777. Look next at this picture and tell me what points of difference you can see between the bridge it represents, and the others we have been speaking about.

P. It looks hollow, as if the road went *through* instead of *over* it.

T. This is why it is called a *Tubular* bridge. The first of this kind was designed about fifty years ago, by Robert Stephenson, son of the great engineer. It carries the Chester and Holyhead Railway over the Menai Straits.

P. It was a strange kind of bridge to invent.

T. Necessity was the mother of invention in this case. Probably Stephenson would never have thought of constructing a bridge in the shape of a tube, if he had not been told that the roadway *must* be 103 ft. above high water mark; an arch of that height could not have been made.

P. It seems wonderful that such huge and heavy tubes could have been hoisted to such a height.

T. Indeed it was no easy matter; each of the four centre tubes weighs over 1,800 tons. They were made on shore, then floated on pontoons to the piers, and lifted by machinery. The bridge took five years to build. Robert Stephenson built a similar bridge at Conway, in North Wales.

P. There is one kind of bridge you have not told us about—the Suspension Bridge.

T. Perhaps you will be surprised to hear that it is of very ancient origin. The people of Peru made a great number of bridges over the passes of the Andes, which were a simple kind of suspension bridge.

P. Not of iron, I suppose?

T. No; they were made of a strong kind of rope woven from the bark of trees. Sometimes a sort of roadway was formed, but more often a basket was slung upon the rope and drawn backwards and forwards from one side to the other. Even at the present day this contrivance is still used.

The Chinese made suspension bridges with iron chains at a very early date.

P. They are often called chain bridges, are they not, instead of suspension bridges?

T. Sometimes. The first English one was thrown across the Tweed, at Berwick. There is a beautiful bridge of this kind at Clifton, over the river Avon, and there are many others both in England and America.

P. You spoke just now about pontoons; what are they?

T. Flat-bottomed boats or barges, used in constructing military bridges. Why are quickly-made bridges wanted in war, do you suppose?

P. In making long marches, the troops would have to cross rivers, or arms of the sea, where there were no bridges.

T. Why could they not be ferried across in small boats?

P. It would take too long, the enemy would gain an advantage.
The cannons and gun-carriages could not be conveyed in small boats.
Nor the cavalry.
Nor the baggage-waggons, tents and stores.
How is a pontoon-bridge put together?

T. There are various ways. The commonest plan is to place the pontoons at equal distances across the water—from eight to sixteen feet apart—fixing each in its place with anchors. A platform of planks is then laid from one to another. In this manner a roadway can be formed eleven feet wide or more. Some pontoons are now made which are divided into four compartments. Why is this?

P. Perhaps in order that they may be taken to pieces and more easily transported from one place to another.

T. That may be one reason, but not the chief one. When a boat springs a bad leak, what happens to it?

P. Generally it sinks.

T. True, but this would be a serious matter if the boat formed part of a bridge.

P. Oh, I know now! Of course, if there was a leak, and the boat was divided into four, the water would only fill one-fourth of the boat.

T. Yes; there would be no serious consequences, for the pontoon would keep afloat.

Army bridges have been known from early times. The Romans used wicker-work boats covered with hides, to support the timber platform.

CHAPTER XIV.

Composition.

COMPOSITION is the art of expressing one's thoughts by means of written words.

It may be observed that no subject is better calculated than this to shew the quality of the education given in a school. Nothing can afford a clearer proof that a pupil's faculties have been carefully cultivated, than his ability, first, to think intelligently upon a given subject, and then to clothe his ideas in clear, correct language.

Efforts of the Department to improve Composition.—Our educational authorities have recently endeavoured to direct the attention of teachers to this important point. "The Instructions to Inspectors" recommend that, "From the first, the teaching of the English language should be supplemented by simple exercises in composition; *e.g.*, when a word is defined, the scholar should be called on to use it in a sentence of his own." We will now proceed to shew how these wise counsels may be so carried out as to bear good fruit.

Composition in the first four Standards.—If the query be put—In which standard should language lessons commence? We reply—In the lowest, if not in the infant school. Until young children have learnt to "*Talk with the pencil*," they must have plenty of *oral* practice in expressing their thoughts. A beginning may be made as follows:—

Let the teacher write a familiar word on the board (or point to one on the spelling sheet) and ask the children to

make sentences which shall contain it. She may reward the one who does this best, by writing up his "composition" for the admiration of the rest of the class. Then another word may be taken in the same way, and so forth.

Now and again, the teacher may make up a little story, and ask the children to reproduce it in their own words.

If these simple exercises are persevered with, day after day, the class will not only acquire ease of expression, but will also be brightened in other ways; and this oral practice will form an excellent preparation for the next stage in composition, viz.:—

Expressing thoughts with Pen or Pencil.—The idea must be in the child's mind before he can express it; and it will be found necessary at the outset to suggest some ideas. To this end, let the teacher (for example) point to the clock, or take a letter out of her pocket, or walk across the schoolroom, saying, at the same time, "Tell me upon your slates what I have done." Or, let her call out one or two children and let *them* do something which their companions may write about, such as shutting the door, working a sum on the blackboard, or shaking hands.

A further development of this exercise consists in saying *how* the action is done, and, with a little training, may result in the introduction of many every-day words and descriptive phrases.

For instance, the scholars will soon learn to describe the manner in which two of their companions sit down—"on chairs," "side by side," or "one just in front of the other." Or again, they will state that this child dropped a pencil, and that one picked it up "directly," "in a minute," or "at once." They can be led on to introduce prepositions, as they describe how a certain scholar "walked *from* one end of the room *to* the other," and "put a book *under* the desk, or *on* a table."

This is a particularly useful and entertaining exercise—one in which children cannot fail to take delight.

The next step.—There is no doubt that children, with few exceptions, find even these initial efforts difficult; but a skilful teacher will lead them on very gradually. The next step may consist in proposing some simple subject to the class, and desiring them to write three, four, or six sentences about it.

The following examples may serve to illustrate our meaning:—

Subject—"Street Lamps."

"The lamps are lighted at dusk."
"I like to see the row of lights all along the road."
"All night long the light from the street lamp shines into my room."
"One of the lamps was broken, so the wind blew out the light."

"Tram-cars."

"The tram-cars pass down our street."
"You can go a long way on a tram-car for a penny."
"I never know what to do with the ticket given me in the tram-car."
"When the tram-car is loaded, the poor horses can hardly pull it along."

Connecting Sentences.—As soon as tolerable facility has been attained in the correct formation of simple sentences, the children may be trained to connect two or more statements by means of suitable conjunctions and relative pronouns. Thus: suppose the word chosen to be "London," one child would perhaps say—"London is the largest city in the world"; another—"I was born in London"; and a third—"London is on the river Thames." From these simple sentences may be derived—"London, the largest city in the world, is on the river Thames." "I was born in London, which is the largest city in the world, and stands on the river Thames."

How can Children be taught to describe?—Descriptive writing is not easy, but if good use is made of objects and pictures, the scholars will soon be plentifully supplied with ideas; especially if a little judicious assistance is afforded, and too much not expected at first. Should

they seem shy and dull about giving expression to their thoughts, they must be encouraged with all ingenious kindness, and not suffered to perceive that their teacher is disheartened by their imperfect efforts. It may inspirit them —after placing a picture in front of the class—to write some such leading questions on the board as—"What things (or persons) do you see in this picture?" "Where are they?" "What are they doing?" "What do you suppose they are going to do?" "What names will you give the persons in the picture?" (N.B.—Let the scholars give names according to their fancy.)

This will give them a good start, and before long they will be able to make original and intelligent remarks upon any picture shewn them.

Let the Scholars be trained to use their eyes.—At times, the class may exercise their descriptive powers upon some object taken from the school museum. But here the teacher must be on her guard against expecting them to see all that is apparent to herself in the article exhibited. At first, a child sees very little in an object. Least of all does he discover its various *properties* and *uses*.

The rule to be followed is: Place the article before the pupil, and let him use his natural faculties to see in it all that he can. Then, by skilful questioning and suggestions, help him to see more. Follow the child instead of making him follow you. Ideas grow by degrees, as everyone who has tried to follow the workings of a child's mind, will have proved for himself. The Great Teacher gives us the true principle of all growth in the words—"First the blade, then the ear, after that the full corn in the ear."

Accordingly, it is a great mistake to interrupt the logical sequence of ideas while they are forming in a pupil's mind. This is sometimes done with a view to *helping* him to clearer and more correct notions; but it will be found that a maimed, instead of a perfect conception, is the result.

Other Exercises in Sentence-writing. — Let the class have frequent practice in altering the *form* of a sentence.

To begin with, let declaratory sentences be changed into the interrogative form; example—

It rains. Does it rain? The dog growled. Did the dog growl?

Again, these sentences may take the exclamatory form, as—

How fast it rains! How the dog growls!

A *number* of similar examples should be given, until the children make the change from one form to another with perfect readiness.

Vary the Arrangement of the Words.—By a different arrangement of words and clauses, much variety may be introduced. Pupils may be profitably exercised in changing the position of words in a sentence, without altering the meaning, *e.g.*:—

London is the largest city in the world. The largest city in the world is London.

The form of the verb changed.—*e.g.*:—

Perseverance overcomes every difficulty. Every difficulty is overcome by perseverance.

The farmer tills the ground. The ground is tilled by the farmer.
His horse threw him. He was thrown by his horse.

Phrases Substituted for Words.—Accuracy of expression may be gained by requiring the pupils to substitute phrases for certain words, and *vice versa*. Example:—

He wore a *felt hat*—a hat made of felt. Many people like *flattery*—to be flattered. He waited *anxiously*—with much anxiety. He accused them of *ingratitude*—of being ungrateful.

Sometimes one word will express the meaning of a whole phrase, and it is excellent practice for children to *summarize* in this way. *e.g.*:—

He is always trying to benefit others. He is very *benevolent*.

This seemed a fit time for executing his purpose. This was his *opportunity*.

There are thousands of plants growing under the waters of the ocean. There are thousands of *submarine* plants.

The above are a few of the ways by which children in Standards I. to IV. can gain experience in simple composition. The intelligent teacher will devise many similar plans. The main point is to give the scholars abundant reiterated practice in each. A few *desultory* lessons will not prove of the slightest service.

Composition in the higher Standards.—Daily practice according to the system we have set forth ought to have produced considerable ease and fluency ere the higher classes are reached. Let us, nevertheless, entreat teachers and examiners to bear in mind what immature beings are children under twelve, and how irrational, nay, how cruel it would be to expect from them anything approaching finish and elegance of style. It should surely suffice if such juvenile students think, speak, and write like thoughtful, well-educated *children*. A school ought to be a *Kinder-garten*, not a forcing house. An infant prodigy is a sorrowful sight. Let children think and act after the manner of children. S. Paul had one of the keenest intellects the world has ever known, yet even he testified of himself: "When I was a child I spake as a child, I thought as a child, I understood as a child."

Having given this caution, we will now consider how the study of composition may be continued in the upper Standards:—

Reproducing Stories.—In Standard V. the children must have practice in writing short stories. The first point to insist upon is, that no subject shall be taken in hand until it is thoroughly understood; this can only be ascertained by close questioning. The second is of no less importance:

Each child must be strictly forbidden to begin a story till he has a clear idea of what he is going to say, and has made an outline sketch of his composition.

There are various ways of training children to write short stories. The following plan is one of the best:—

Begin by reading the story, with such explanations as appear needful. While careful to make no actual addition to the subject-matter, change the words and paraphrase freely, in order to bring home the meaning more forcibly to the pupils.

Next, put a plain outline of the story upon the blackboard, and let the children supply details, which you will write on the board—if it appears best. Take each heading separately, and elicit all you can respecting it, before proceeding to the next. The outline only being left on the board, the pupils will, in the last place, be required to write out the story as well as they can.

Even a short anecdote or fable should not be written until definite headings have been drawn out. An exceedingly easy example is given below:—

Fable—"The Wolf in Sheep's Clothing."

A wolf dressed himself up in the skin of a sheep; and by this means contriving to creep in among the flock, he devoured a number of sheep. At last the shepherd discovered the trick and caught the marauder. Fastening a rope round his neck, he strung him up to a tree that stood hard by. Some of the shepherd's friends, happening to pass that way, saw what he was about, and said, with great surprise:—"How is this, brother, do you hang sheep?" "No," replied the shepherd, "but I hang a wolf whenever I catch him, though he be in sheep's clothing." Then he showed them their mistake, and they agreed that the punishment was just.

After this little fable has been read and fully explained, the following outline may be written:—

The wolf's disguise and depredations. Discovery of the trick. Punishment. Surprise of the passers-by. The shepherd's explanation. Approval of the sentence.

In order to make children familiar with this very elementary

form of composition, it is well to prepare a number of outline stories (written in bold characters) which can be placed in turn before the class, in order that, from this framework, they may work out suitable sub-divisions.

Before they can do this without assistance, they will require some oral practice in filling up these sub-divisions in their own words. For it must be remembered that the reproduction of a story is not intended to be a mere tax upon the memory. On the contrary, the lesson only fulfils its purpose when the scholars shew, by their choice of a different phraseology, that they have grasped the sense of the original.

Long Sentences not to be Permitted at First.—Children have a natural tendency to run on through great part of a page without a full stop—repeating continually the words—"and," "so," or "then." This bad habit must be checked, or, better still, provided against. One way of doing so, is by training them to write a great variety of *short* sentences — with their proper capitals and punctuation. Another expedient is to require them to ask and answer questions in writing. This forces them to break up the sentences into short phrases.

Consecutive Sentences must also be formed.—If it is necessary with very young pupils to insist on short, terse sentences, it is equally needful to teach those a little older how to write consecutively—using the proper connectives. To continue to insert a full stop and a capital after every six or seven words, would result in the formation of a childish, jerky style. Such a production as the following would be very objectionable:—

> A crow was very thirsty. He flew to a pitcher. He found water in it. But it was very near the bottom. He stooped and strained. He could not reach it. Next he tried to overturn the pitcher. He was not strong enough for this. Some pebbles were near the place. He cast them into the pitcher. The water was slowly raised to the brim. He satisfied his thirst.

If this is read to the children, they will perceive its crude, unpleasant sound for themselves. They must be taught that it can be remedied by joining two or more sentences together by the help of conjunctions, etc. This is also a good opportunity of shewing them the usefulness of participial phrases. Let them hear the same fable in its amended form :—

> A crow that was dying of thirst, flew eagerly to a pitcher which he had perceived from a distance. When he came, he found water in it indeed, but so near the bottom, that, with all his stooping and straining, he was not able to reach it. Then he tried to overturn the pitcher that, at least, he might be able to get *a little* of the water; but his strength was not equal to this. At length, seeing some pebbles near the place, he cast them one by one into the pitcher. Thus by degrees he raised the water up to the very brim, and satisfied his thirst.

The above is only given as a sample. Teachers will find it repay them to treat several short stories in the same manner.

Letters.

Letter-writing is one of the most important branches of composition—entering, as it does, so largely into the daily business of life. To be able to write a good letter will be of more practical value to our scholars, than almost anything they learn while at school. Furthermore, the ability to do this, is of real *present* service to their parents, who, whatever their station in life may be, highly esteem the school that early puts such a power into their children's hands. The teacher who is possessed of tact and wisdom, will take care that well-written letters on subjects of general interest are often taken home by the children.

In the upper Standards, boys and girls should be taught to write good business letters, to draw up advertisements, to sign receipts, and to fill up invoices and other forms.

They should have some practice in this branch of composition before they enter the senior classes. Once or twice a

week—from the second or third standard upwards—a short note or letter should be written. This may be sometimes transcribed, or copied; at others, written from dictation; and, from time to time, a lesson on composing a simple letter should be given on the blackboard.

At this lesson, the teacher should enter into all needful particulars—shewing precisely the proper place for the date and address, where to commence the letter itself, and the various ways in which it is customary to begin and conclude.

However simple the subject-matter may be, the writer should be trained to arrange it properly. If this is done as a matter of course, from the very beginning, it will strike at the root of that habit of rambling, pointless letter-writing which is so common.

Different kinds of Letters.—Letters vary greatly in their subject-matter and the purpose for which they are written :—

I **Public Letters,** or communications to the editors of newspapers and periodicals. — These sometimes give an account of what is happening at the place from which they are written; but, more often, they are on topics of common interest—as commerce, agriculture, education, and politics. Such correspondence now forms a prominent feature of all leading newspapers. It does not call for much depth or erudition, but rather for a brilliant, striking mode of expression. The admixture, where suitable, of a little humour, is always desirable. As the space allowed is limited, newspaper letters ought to be concisely written, and the temptation to digress from the subject resisted.

Of late years, even school-boys have sometimes composed public letters; and, when these have been written in an original style, and have treated of matters concerning which young people are entitled to express an opinion, they have occasionally appeared in print.

II. Business Letters. — For these, a business-like clearness is all-important. They should be brief, and keep strictly to the matter in hand.

III. Letters of Friendship.—This is the most usual kind of correspondence—particularly for young people, who are continually called upon to write such letters—not only on their own account, but for their parents—to relations, friends, or employers, on one subject or another.

IV. Letters written on special occasions. — Letters condoling with friends in sorrow, or congratulating them upon some happy event, are often called for. Stiffness must be avoided here, and anything that sounds artificial. Such letters should be sincere, brief, and natural.

V. Notes.—Besides the above, there are short notes which, in every class of life, have to be frequently written; notes of invitation, excuse, apology, or request. It is essential that children should have practice in this kind of correspondence, as it often proves more of a difficulty to the inexperienced than the composition of a long formal letter. For instance, it is very usual to write notes in the third person; but what a common error it is to begin a note in the third person, and then slip inadvertently into using the first or second; *e.g.*:— "Mrs. Barton presents her compliments to Miss Martin and hopes *you* will excuse her, etc."

Practical Hints for Teaching Letter-Writing.— It may be useful here to give a few suggestions as to the best way of teaching children how to conduct such correspondence as is likely to fall to their share:—

The paper must, at first, be ruled. Two pencil lines should likewise be traced parallel with the left-hand edge, one nearly an inch, the other an inch and a half from the margin. All paragraphs must be commenced on the latter, and other lines on the former.

A letter includes—(1) the address of the writer, and the date; (2) the complimentary beginning; (3) the body of the letter; (4) the complimentary ending and signature. Post-scripts are short sentences added to the letter after the signature. It is better to avoid them by remembering all that has to be written before signing the name.

Neatness.—The appearance of a letter is important, especially when addressed to a stranger. The following directions are good:—Begin about one-fourth from the top of the page. Write straight. Leave a margin at the bottom of the paper, as well as at the left-hand side. Begin a fresh paragraph with each fresh subject. Leave plenty of room for the signature, and so manage that your letter shall not end at the very top of a page. Attend to punctuation. Never divide a *proper name*, and if you are obliged to divide other words, be careful to syllabify properly.

How to Begin and End.—There are certain recognised ways of addressing correspondents which all ought to know. The usual mode of beginning a letter to a superior, or a stranger, is, "Sir," "Madam," "Dear Sir," "Dear Madam." If the letter is to an acquaintance, "Dear" or "My dear Mr.——" would be right; if to an intimate friend, the christian name will naturally be used. (The addition of "My" implies greater intimacy.)

The ending of a letter demands no less care. To superiors we should subscribe ourselves, "I beg to remain," or "I have the honour to remain, yours respectfully;" to ordinary business correspondents and mere acquaintances, "Yours faithfully," or "Yours truly;" to intimate friends and relations, "Believe me, yours affectionately," or "Your affectionate child, brother," etc.

Remembrance of Friends.—It is the custom in letters of friendship to send courteous and affectionate messages

to other members of the family, such as—"Please remember me kindly to Mrs.——— and your daughter"; or in the case of relations—"Give my love," etc.

General Style.—Let children be informed that, *the tone* of a letter must depend upon the degree of intimacy between the correspondents: To superiors it ought to be respectful; to inferiors courteous; to relations and near friends affectionate; and it will be grave or gay according to circumstances.

Among other points it is well to warn our pupils that *what we write remains*. The receiver of a letter may possibly keep it, to use against the writer at a future time. If, therefore, it is wise to think before one speaks, it is even more needful to think before one writes. Never should anything of a slanderous or ill-natured character be committed to paper. Many a correspondent has paid dearly for having allowed his pen this dangerous liberty, for he has been sued for libel, and heavily fined.

An egotistic style is also to be deprecated. A person who fills his letter with accounts of his own doings and opinions shows very bad taste. A friend doubtless expects *some* personal intelligence, but other information should be supplied as well.

Directing the Envelope.—This likewise requires to be practised by the children, under supervision. Nothing more surely betrays want of education, than the manner in which the address is often put—cramped up into one corner, or else sprawling awkwardly all over the envelope, ill-spelt and worse written. The thousands of letters which are destroyed every year because even a post-office clerk cannot decipher the direction, shews that this matter needs more attention than it at present receives.

Teachers will do well to write on the blackboard sketches of different kinds of letters. We append the following specimen:—

Outline of Letter applying for Situation.

Subject.—The writer is seeking a situation as clerk, and answers an advertisement.

Letter :—

(*a*) Address.

(*b*) Date.

(*c*) Complimentary beginning.

(*d*) States in what paper he has seen the advertisement.

(*e*) States his own qualifications for the post, especially the amount of experience he has had.

(*f*) Offers to supply references to former employers and also to the clergyman whose church he attends.

(*g*) Formal ending.

(*h*) Signature.

(*i*) Superscription.—(The name and address of the person to whom the letter is written, should always be added to a business letter).

Descriptive Writing in the Higher Standards.—Description forms an important part of composition at every stage. Care must, however, be taken to use words adapted to the nature of the objects described. *Material objects*, *scenery*, and *persons*, are subjects which most commonly call for description. Such heads as the following will be found useful; the writer must select from them those which appear most suited to his purpose :—

Material Objects—

(1) The mode in which the writer became acquainted with the object in question, or the circumstances under which it was last seen by him.

(2) *The date* of its first discovery, or invention; together with any historical facts or traditions connected therewith.

(3) *By whom*, and *of what* made.

(4) *Form*, size, colour, and ordinary appearance; as viewed in itself, and also as compared with similar objects.

(5) *The purpose* for which it was originally made (or procured).

(6) *Its present uses* to mankind in general, or to the writer in particular.

(7) *Writer's opinion* about it.

Scenery—

(1) *The situation*—country, place, neighbourhood. *The time* of day—whether at dawn, noon, evening, or night.

(2) *The season* of the year, the weather, etc.

(3) *Natural features* of the scene ; level or mountainous, on the coast or inland, embracing streams, woods, meadows.

(4) *Additions made by art*—by cultivation, buildings, and productions of human industry.

(5) *Inhabitants*, or other living creatures ; *e.g.*, cattle, birds, horses, deer.

(6) *Sounds*—plash of waves, noise of wind, rain, or thunder, rustling leaves, lowing cows, cries of children, whirr of machinery.

(7) Comparison with some other scene or scenes.

(8) Any historical details.

(9) Feelings awakened in the writer's mind—of admiration, wonder, delight, or repulsion.

Persons—

(1) Age (to which of the seven ages of man the person described seems to belong).

(2) General appearance : whether tall or short, thin, etc., and whether there is any marked peculiarity, such as great beauty or deformity.

(3) Position in life, dress, or occupation.

(4) Manners : gracious, haughty, awkward, agreeable or the reverse.

(5) Mode of speech.

(6) Character, abilities, virtues, vices or faults, acquirements, accomplishments.

Essay Writing.

Between the re-production of a story in Standard V., and the composing of an essay in Standards VI. and VII., there is an immense stride. The term "essay" literally signifies an *attempt*, and is generally applied to literary productions in which the writer briefly sets forth his ideas on a given topic. The sixth-standard scholar is expected, at the examination, to furnish some creation of his own brain—no material being supplied for the purpose. It must be acknow-

ledged that this is a formidable test, and the teacher will be disappointed who expects a high standard of excellence. Still, if good previous training has been given, children will often express themselves with considerable force and freshness.

Subjects for Essays.—There is real difficulty in finding subjects suitable for such youthful essayists. Ancient philosophers warn us—"*Not to search in any mind for that which it does not contain.*" Now, the mind of a child of twelve or thirteen contains very little encyclopædic knowledge, and to expect him to be ready to give his notions *impromptu* upon a number of miscellaneous matters, or to compose a theme upon some abstract question, would be ridiculous.

If a child's essay-writing is to have any satisfactory result, it must refer to some subject with which he is not only familiar, but upon which he is capable of forming an opinion. The object of composition is not to furnish fresh ideas, but to test the power of putting into words those already possessed.

It is well to begin by getting the children to describe any incident that has happened within their range of observation, as—a visit to relations; a severe thunderstorm; a day at school; Christmas holidays; the street they live in; or a cricket match.

A further step would be a written account of some public event, about which all the world was speaking. But here the teacher would have first to ascertain, by means of a class-talk, the extent of the pupils' knowledge of the circumstances, and secondly to supply what was lacking. Supposing the subject were a shipwreck, royal wedding, public funeral, or similar incident, an illustrated paper should be provided.

Other Lessons Utilised.—The principal material for essays will obviously be furnished by the oral lessons given in the school; and such compositions may, with advantage, be written by the elder pupils at home. A set of object lessons,

embracing rather a wide range, may well be given for the express purpose. By this means, a child in the higher standards will gain a fair idea of what is passing in the world —in the way of explorations, scientific inventions and discoveries, and commercial enterprise.

A series of humanity lessons should always form part of the course. If principles of mercy and justice towards the lower creation are to prevail, they must be instilled in the school-room. Instruction on the treatment of horses, dogs, cats, and other domestic pets would be popular with the children, and the subject being well within their grasp, and appealing to their better and deeper feelings, good fruit—in the shape of some spirited compositions—might reasonably be expected.

Again, teachers will find excellent matter for more ambitious attempts at essay-writing in descriptions of arts and manufactures, mining, farming, and building operations. Charities—such as Hospitals, Orphan Asylums, Missionary Associations, Drinking Troughs and Fountains, Life-boat Societies, Homes for Lost Dogs—and many others that have for their object the protection of the helpless, may also be turned to good account for the purpose.

If a list of the Object lessons and Science lessons given during the year were presented to H.M. Inspector at an Examination, he would often prefer to select the subjects for composition from these.

Geography and History Fertile Subjects.—Varied and abundant matter for descriptive writing is supplied by the geography lesson; the material afforded by the natural features, habitations, people, customs, cities, food, clothing, animals, vegetation, belonging to different countries—is literally inexhaustible.

Then how prolific in subjects of interest is history! Will it not cement in the children's memory the great events of the world, if they are called upon to repeat the record in their own words? What scope may it not afford for their ingenuity,

in reproducing interesting stories from ancient and modern writ, or describing a pictured representation of some striking incident!

Definitions.—As facility in even elementary composition includes aptitude in giving correct and clear definitions, it is desirable to have a few simple and general rules on the subject, and the scholars should be occasionally exercised in defining both abstract and concrete terms.

They should also be shown in what respects a definition differs from a *meaning* and a *description*. Let the example be such a well-known word as *quadruped*. Its *meaning* is "four-footed." Its *definition* would be "An animal having four feet." The *description* would require details as to size, form, colour, and general structure, to be added. It does not follow, of course, that every term admits of all three processes being applied to it.

The chief rules for giving appropriate definitions are the following:—

(1) A definition always requires more than one word to express it. To explain "courage" by the single word "bravery" would be no true definition.

(2) A word or term is not defined by telling what it is *not*. Thus, "truth" would not be defined by saying that it is not falsehood.

(3) A definition should not include words derived from the term to be defined. To define "temperance" as "the virtue of being *temperate* in eating and drinking," would violate this rule.

(4) A definition must be neither too wide nor too limited. "An animal that eats grass," would be too *wide* a definition of "horse," because there are other animals that eat grass. On the other hand, the following definition is too *narrow*, *e.g.*—"An equilateral triangle has three equal straight lines," because there are equilateral triangles which have three equal curved lines.

A few terms are subjoined for practice in definitions:—

Bird.	Lemon.	Forest.	Tree.
Ink.	Park.	Food.	Light.
Reptile.	Shark.	Sun.	Gallon.
Clock.			

Industry.	Frugality.	Envy.	War.
Pride.	Truth.	Pity.	Poverty.
Perseverance.	Justice.		
Architecture.	Writing.	Chemistry.	Sculpture.
Printing.	Theology.		
Society.	Machine.	Statesman.	Merchant.
Meadow.	Helm.	Orphan.	Wit.
Language.	Gunpowder.	Market.	Insurrection.
Superintendent.	Plough.	Magistrate.	

Subjects for Composition commonly given.—A list is appended of subjects which have been given frequently at examinations. Many of them are remarkably suitable, and might be used with advantage year after year. Others—such as those on familiar proverbs—cannot be recommended, as the material they afford is of too scanty a character. We may observe, in passing, that those Inspectors who give a choice of six or more subjects seem to deal the most fairly by the children. If but one topic is allowed, it may happen that half the class are profoundly in the dark as to what it even means. A great obstacle to the production of creditable essays on such occasions is the inadequate time allowed for writing them.

Subjects given at School Inspections.

A Railway Station.	How to help Mother.
A Sea Voyage.	Taking care of Baby.
Ships.	Games.
Journey through a Desert.	Story of your Recitation.
The Whale Fishery.	Life of any Great Man.
The Steam-engine.	A Day in your Life.
A Shipwreck.	Town and Country.
The Post-office.	Harvest Time.
A Joiner's Shop	Dogs.
Description of a House.	Elephants.
,, ,, School.	Cruelty to Animals.
,, ,, Church.	Kindness to Animals.
,, ,, Farm-yard.	Bees.
,, ,, School-treat.	Fish.

The School Museum.
History of a pair of Boots.
,, a Coat.
,, an Umbrella.
,, a Loaf of Bread.
Butter
Foreign articles of Food.
"Half a loaf is better than no bread."
Coal.
Sugar.
Birds' Nests.
Slates.
Salt.
"Honesty is the best policy."
"Constant dripping wears away the hardest stone."

In the next place, we give a list of subjects which are not, we believe, quite so hackneyed as those above. They will be found to afford scope for thought and intelligence, and to be fairly within the capacity of the juvenile writers who have to be considered.

The influence of kind words.
Why we should treat the aged with respect.
Flowers (not considered botanically).
How to succeed in business.
Mirrors.
A Rainbow.
Old clothes.
New clothes.
Nothing is lost.
Money either a blessing or a curse.
Our present condition compared with that of the Ancient Britons.
Ditto—with England as it was a hundred years ago.
Music.
What I can do when mother is ill.
Common things.
Dairy produce.
Why unselfish people are happy.
What kind actions a boy can perform.
A Miser.
A Spendthrift.
Presence of mind in danger.
The cowardice of crime.
Wasting time.
Harness of a horse.
Care of a pet bird.
A town in the early morning.
The country ,, ,,
Trifles.
Good manners at home.
Progress in manufactures.
Bad companions.
Treatment of a horse—
(1) In the stable.
(2) As a beast of burden, or draught.
What to do in a shipwreck.
What to do in a burning house.
Advantages of a gardener's life.
,, ,, clerk's life.
,, ,, bookseller's life.
,, ,, letter carrier's life.
,, ,, railway porter's life.
Window gardening.
Gardening for the seasons.
The Mohammedan Religion.
Bhuddist Religion.

Robinson Crusoe.
Some great inventors.
Absent friends.
Patriotism.
Pompeii.
The Pyramids.
A Diamond Mine.

Having suggested subject-matter, we will now offer some advice on the difficult task of preparing children to write an essay.

Before the Essay.—The preliminaries of an exercise in composition constitute its most important feature.

First, there must be the careful ascertaining on the part of the teacher that the class know and understand what they are going to write about. Unless this knowledge is clearly grasped, not even a moderately good composition can be expected.

Secondly, the pupils must have learned how to spell, to punctuate, and to express themselves without grammatical errors. Anyone who has not mastered these *elements* had better be sent to do so in a lower standard, as he would be a sad drag upon the rest of the class.

Thirdly, there must be correct ordering of ideas. The commonest fault in essay writing is that of confused and haphazard arrangement. One head of the subject is taken up, and dropped almost directly; another is then touched upon—perhaps a third—after which there is a return to the first; lastly, the beginning and end are dovetailed in, and the main part missed out altogether.

Accordingly, let this golden rule be unfailingly observed by the scholars:—*Prepare an analysis of your subject before you begin.*

Speaking generally, every essay must have a beginning, a middle, and an end; and the middle, or body of the essay, nearly always requires division and subdivision. The beginning must be so clearly expressed that it needs no statement to make it plain, neither must it be out of proportion to the length of the whole. Nor must an essay

end abruptly, or convey the idea that it is unfinished. Much care should be bestowed on the commencement and conclusion, so that the reader may both begin and leave off with a favourable impression.

Reflection Needed.—Having stated what should constitute the main divisions of a child's essay, let it be again insisted upon, that it is indispensable to pause and reflect, before dividing up the subject in some convenient fashion. Those who rush at a composition, without thought or previous plan, are tolerably sure to flounder about in an aimless kind of way, and will really seem far more ignorant than is actually the case.

It is absolutely necessary that the teacher should, for some considerable time, suggest the heads, and then help the pupils to work out subdivisions and details. Teachers who persevere in this, vigorously and patiently, will be much encouraged by the readiness and skill some children will begin to exhibit, after a few months of practice.

Outlines of Essays Given Below.—With a view to aid teachers in carrying out this advice, a few specimen outlines are appended, in which the divisions are distinctly marked. Following the plan there indicated, teachers will find no difficulty in sketching out, on the same lines, any other subjects that may seem appropriate.

How to be Used.—When using sketched-out essays for blackboard exercises, the teacher should first write down the *main divisions* (those printed in heavy type), leaving a good space between each. Next, the subordinate ideas must be filled in—those marked (*a*) (*b*), etc., the class being required to supply the material, so far as they can.

This will be as much as the children will be able to manage for some time. But, so soon as they find outline-writing easy, the teacher can go on to build up (always with their help),

more of a finished essay. The headings will, of course, be strictly adhered to. But the facts will be woven together and fuller information added, so as to make the exercise read smoothly and pleasantly.

Children's Ability to Work Alone Tested.—When the school year is well advanced, the teacher should, about once a week, require Standards VI. and VII. to produce a composition, unaided. The pupils must be reminded of the necessary preliminaries; and if even several minutes are spent in these, it will not be too long; for it has been truly said—

> "The first, second, and third precept which should be enjoined upon an essayist is—*think*, THINK, THINK. You should worry your subject as a dog does a bone. You should walk round it and attack it from all sides. You should break it in pieces and scrutinise it carefully."

When the child has jotted down on his scribbling paper all the facts that his memory can furnish, he must make up his mind how he will arrange them. It is sometimes best to mark the headings *a*, *b*, *c*. Then let him take them *seriatim*, and work out the details according to the directions given above.

The Conclusion Often a Difficulty.—Children should be cautioned to decide how they will end their essay before they begin to write. An appropriate anecdote, an old saying or proverb, or some historical allusion, often constitutes an effective ending. It is well known that grown men sometimes find the conclusion of speeches and sermons such a difficulty that they wander on and on, positively unable to end. Can we wonder, then, at the difficulty experienced by the poor little essay-writers of our primary schools?

General Headings.—It is a solid and real way of helping juvenile writers to furnish them with good general headings for the various classes of essays. Many kinds of subjects follow an almost unvarying sequence, though, of course, this is not the case with all.

For instance, a summary of the life of some celebrated man usually falls more or less under these divisions:—

(*a*) Parentage and birth;
(*b*) Childhood and early life;
(*c*) Entrance on life-work or public duties;
(*d*) Condition of affairs which brought him into notice; *e.g.*:—
Wilberforce through the Slave Trade,
Wellington through Napoleon's Aggressions,
Joan of Arc through the humiliation of her country;
(*e*) Principal events of life, and descriptive anecdotes;
(*f*) Last illness and death;
(*g*) Character and qualities.

Again, suppose the essay to be upon some natural production, it is seldom that it would not subdivide much as follows:—

(*a*) Definition and description;
(*b*) Different kinds;
(*c*) Where found;
(*d*) How prepared;
(*e*) Uses;
(*f*) History.

Should the composition be upon some virtue such as *gratitude*, it may be thus sketched out:—

(*a*) Definition—what is gratitude?
(*b*) What has ever been the universal opinion of this virtue
(*c*) Causes of ingratitude.
(*d*) Examples of gratitude—(1) in man; (2) in animals.
(*e*) Practical conclusion.

These are but samples, and it is not intended that children should be restricted to any particular formula. Great freedom is allowable in this respect, for amid the variety of existing topics, strict uniformity would be quite impracticable.

Children Should be Encouraged to Take a Personal Interest.—As the pupils gain aptitude, all means must be used to rouse their personal interest in the work.

If the subjects selected for composition are given out a week beforehand, or still better written upon a wall-slate, some of the children, at any rate, will try to hunt up information respecting the various lessons for themselves. Gradually it might come to be an understood thing that the scholars in Standards VI. and VII. should make some private preparation for their composition exercises. If this is to be the case, however, it is necessary that they should have access to a small cyclopædia and other works of reference.

Correction of Essays.—In a large school it is not possible for the master or mistress to examine each composition separately. Nor is this necessary except perhaps in Standards VI. and VII., when pupils are approaching the end of the course. A great deal may be done by the teacher and her assistants passing round and correcting as they go. Then, some of the cleverer children may be employed to mark the mistakes in grammar, spelling, and punctuation.

The more finished productions of the elder scholars, especially those done as home-lessons, should be looked over by some competent person, and afterwards a fair copy made by each pupil in a book kept for the purpose. This will probably be shown at the examination, and every exercise should be dated. Corrections are best made in red ink, as these are certain to arrest the pupil's attention. To save time, mistakes may be marked by letters, the meaning of which the children have been taught to understand, as:—(S) spelling faulty; (P) punctuation requires attention; (G) grammatical mistake; (E) erroneous statement. Other faults would generally need to be more fully noticed.

It is sometimes customary to assign a certain number of marks, say from 25 to 50, to such lessons as composition, one or more marks being forfeited for each mistake. So important is the subject of essay-writing, that it is well to write up each month, in order of merit, the names of those who distinguish themselves in this branch of their education.

Keen Interest may be Excited by these Methods.—The system we have tried to depict is not only to be recommended by reason of the ease and fluency of expression which it will foster in quite young children; even more valuable is the desire for information which it may be the means of creating, and the foundation it will possibly lay for subsequent study and a habit of research. When our pupils, of their own accord, take to searching the school library, and diving into books of science, biographical records, dictionaries and gazetteers, in order to add to their store of knowledge, we may have a good hope that we are really educating them, not merely cramming their reluctant minds with dry facts that will quickly pass away, leaving no impression behind.

OUTLINE ESSAYS.

A MINE.

I. Introduction.—A Mine is a deep pit, from which minerals and metals are dug out, mixed with earth and stones. It is only those who have studied the art of mining, that know where to sink a mine and how best to work it.

II. Form of Mineral Deposits.

They are found as—

(*a*) *Veins*, or irregular strips (copper, tin, gold, and silver).
(*b*) *Beds*, or layers (coal, salt).
(*c*) *Masses*, or lumps of metal mixed with earth.

III. Preparation for Working a Mine.

(*a*) Discovery of suitable spot.
(*b*) Sinking a shaft.
(*c*) Digging out galleries and providing ventilation.
(*d*) Draining out water and placing supports.

IV. Procuring the Ore.

(*a*) Ascending and descending by ladders, lifts, or cages.
(*b*) Excavating the ore with a pick, or blasting with powder.
(*c*) Conveying it on trollies.
(*d*) Raising it to the pit's mouth by engines.

V. How the Ore is Prepared.

(*a*) Broken by hammers and crushed by a machine.
(*b*) Sifted and washed.
(*c*) Smelted.

VI. Dangers of Mining.

(*a*) Suffocation from foul air and explosion of gas.
(*b*) Flooding, or falling of earth.
(*c*) Falls from ladders, or machinery going wrong.

VII. Conclusion.—Mining has been carried on from the earliest times, but the old mines were not worked to a great depth. Great Britain has been for the last hundred years the greatest mining country in the world, yet very little was done till about forty years ago to establish mining schools like those of other countries. With the establishment of technical schools everywhere, probably further improvements will be introduced.

SUCCESS IN BUSINESS.

I. To Succeed in Business a Man must have—

(*a*) *Integrity*—that by strict honesty and trustworthiness he may win the confidence of all.
(*b*) *Industry*—without which nothing can be achieved.
(*c*) *Energy*—that he may push forward and not miss opportunities.
(*d*) *Perseverance*—that he may not be daunted by failure or opposition.
(*e*) *Common Sense*—that he may keep from rash actions.
(*f*) *Good Manners*—which will enable him to please his customers.

II He must be Punctual and Methodical.

Compare the man who is always in time and never in debt, with one whose affairs are in confusion, who owes money, and keeps others waiting.

III. He must not be the Slave of Business.

(*a*) *He must not sacrifice to it his religious duties*, by neglecting worship, or doing accounts on Sunday:
(*b*) *Nor health*, working night and day, when ill or exhausted:
(*c*) *Nor Social Happiness*, seeing nothing of his family and friends, thinking only of money-getting.

IV. Conclusion.—The business man who is true and just in all his dealings, who is kind to those that work under him, gives away a share of his earnings in charity, and puts his religion before his gains,

will be leading a high and noble life, and is sure to be *truly successful*, though he may die worth less money than a man who is grasping and worldly, who takes unfair advantage, and gives nothing to the poor.

COMMON THINGS.

I. What are Common Things? "It is only a common thing" are words expressive of contempt, which are often heard. Yet what are the things around us which are most common? Our most precious possessions:—

(*a*) Sunshine is common.
(*b*) Fresh air ,, ,,
(*c*) Water ,, ,,
(*d*) Flowers are ,,

II.—Contrast these precious Common Things with what Science or Art can Supply:—

(*a*) Sunshine with artificial light.
(*b*) Water with any other liquid.
(*c*) Flowers with jewels.

They are easy to be had; let us feel thankful to our Heavenly Father for putting His best gifts within the reach of all. Let us try to see beauty and convenience in the things that lie around our daily path, and then we shall honour, not despise—"*Common Things.*"

III. Value of Common Things Compared with Rare Ones.

(*a*) *Iron is common; gold rare.* Which could we best do without?
(*b*) *Glass common; diamonds rare.* ,, ,, ,,
(*c*) Cotton common; silk rare. Which most useful?
(*d*) Bread common; rich food rare. Would we exchange the one for the other?

NOTHING IS LOST.

I. Economy of Nature.—Throughout the three Kingdoms of Nature, not the least particle is ever lost. All that seems to pass away serves some use again.

II. Instances of Economy in Nature.

(*a*) The *Falling Leaf* enriches the ground, and makes it more fruitful.
(*b*) The *Vegetation of Ancient Days* is now dug up in the shape of coal.
(*c*) The *Vapours* that rise from the earth, form the clouds, and come down in fertilising showers.

III. Science teaches the same Lesson.—Nothing that we have, can be so spoilt and destroyed that it cannot be gathered up again for use, *e.g.* :—

(*a*) *Rags*, no matter how torn or soiled, go to the paper mill.

(*b*) *Bones*, from which a dog would turn, are made into buttons and knife-handles.

(*c*) *Refuse Fat* helps to make soap.

(*d*) *Old Woollen Fibre* is converted into shoddy, besides being valuable as manure.

Conclusion.—The economies of nature and science teach us to waste nothing, to despise nothing, however humble and useless it may seem. The story of the man who made a large fortune by buying up waste bread from inns might be told ; or of the boy who paid the yearly rent by the sale of large strawberries which he had cultivated by collecting sea weed, and using it as manure.

NELSON.

I. Introduction.—Reckoned the greatest naval commander that ever lived. He established England's supremacy on the sea. Was always brave, patriotic, and humane.

II. Birth and Boyhood.

(*a*) The son of a clergyman, the rector of Burnham, Norfolk. Born, 1755. Called Horatio, after his godfather.

(*b*) As a boy had weak health, but great courage and resolution.

(*c*) Went to sea with his uncle at the age of twelve.

III. Sea Life.

(*a*) Served in the West Indies.

(*b*) Went to the Arctic Ocean, the East Indies, and the Spanish Main.

(*c*) Made post-captain when twenty-one years of age.

(*d*) Distinguished himself during the American War.

IV.—Loses an Eye and an Arm.

(*a*) Given command of the Agamemnon, and is sent to the Mediterranean. Loses an eye at Calvi.

(*b*) Helps to gain the battle of St. Vincent. Soon after loses his arm in an unsuccessful attack on Teneriffe.

(*c*) Returns to England and suffers much.

V. Is made Baron and Viscount.

(*a*) Is appointed to H.M.S. "Vanguard," and defeats the French at the battle of the Nile. Is made "Baron Nelson of the Nile."

(*b*) Sent to the Baltic in 1800. After battle of Copenhagen made Viscount.

VI. Death.

(*a*) Takes command on the Mediterranean as Admiral in 1803.
(*b*) Attacks the French Fleet at Boulogne, and is defeated.
(*c*) Battle of Trafalgar where he meets his death 21st October, 1805.

VII. Conclusion.—Nelson was a genius, and left the stamp of genius on all that he did, whether the duty was high or lowly. His whole career from the time he entered the navy till he fell at Trafalgar was that of a hero, and if any man earned the right to address to others the famous saying which has been handed down to us—*England expects every man to do his duty*—it was surely Admiral Lord Nelson.

TREES.

I. Definition.—A perennial plant, belonging to the Vegetable Kingdom, with a woody trunk, often rising to a great height.

II. Characteristics.

(*a*) Strength (the most hardy production of the Vegetable Kingdom).
(*b*) Endurance (the most long-lived vegetable).
(*c*) Beauty.
(*d*) Utility.

III. Varieties of Trees.—Determined by the climate.

(*a*) In *tropical climates* they grow to a great size, bear luxuriant foliage and luscious fruit.
(*b*) In *temperate climes* trees are plentiful, though of fewer varieties, the fruit is smaller, the trees of more moderate height.
(*c*) In *cold regions* trees are hardy and stunted, bear no fruit fit for human food, do not lose their leaves in winter, but are evergreen.

IV. Value of Trees.

(*a*) *Useful in giving shade*, and in making the temperature more equable and the climate healthier.
(*b*) *Useful for wood*, of service for building purposes, and fuel. (Oak, pine, maple, walnut.)
(*c*) *Useful for their sap.* (Maple, pitch-pine.)
(*d*) *Useful as food.*
 (1) For man—fruit of the apple, pear, plum, palm, etc.
 (2) For animals—oak.
(*e*) *Shelter for birds.*
(*f*) Foliage purifies the air, and adds greatly to the beauty of the earth.

V. Conclusion.—The great importance and usefulness of trees should make everyone try to protect them from injury, and cultivate them extensively in suitable situations.

CHAPTER XV.

Elocution.

ELOCUTION may be briefly defined as the art of correct reading, reciting, and speaking. A good elocutionist not only takes care that his words are delivered in such a way that their sense cannot possibly be misunderstood, but also that they are uttered with all the force and beauty of which they are capable.

The voice of a trained reader or speaker has certain agreeable characteristics, which it is rather difficult to define. To begin with, its very sound pleases. It is round, clear, and smooth in tone, and in every way pleasant to the ear. It is perfectly natural and free from all exaggeration of expression. There are no disagreeable nasal twangs, harsh guttural sounds, or affected mannerisms. Each word is given its full value, and is pronounced with perfect distinctness. A sing-song tone on the one hand, or a sententious utterance on the other, are equally avoided; and attention to pause and emphasis, lends impressiveness to the words enunciated.

Elocution, in the modified form of "Recitation," has a place in the curriculum of every elementary school for boys or girls in England. A specified number of lines of poetry must be committed to memory, and repeated at the yearly inspection, by each child educated at the expense of the State.

The prescribed passages are of moderate length, and make no very serious demands on the powers of the young learners. Yet their educational value is not small, and it is matter for congratulation, that while, by recent codes, the study of grammar has wisely been made optional, recitation is still retained as a regular part of the school course.

General Benefits of Elocution.—The training of the voice and expression, which forms the main part of instruction in elocution, is of substantial advantage to *everyone*, no matter what his or her vocation may be.

In domestic and social life, such training confers the power of adding materially to the happiness of those with whom we live. It avails little to have something pleasant to say, unless we can say it pleasantly; while even an unwelcome truth may be shorn of half its bitterness, if expressed in gentle tones and with sympathetic manner. Are we not all well aware, too, that upon our introduction to a stranger, we instantly receive either a favourable impression or the reverse, according to his manner, and mode of speech? Then, in mercantile pursuits, how largely does a man's success depend upon the possession of a pleasing address! It not seldom happens that a good situation is lost, simply because the applicant has never been trained to speak with ease and a certain degree of polish. Lastly, in public life, the ability to clothe the thoughts in forcible and convincing language makes a man all-powerful.

Moreover, there is much that is educative in the study of elocution; for it strengthens the mental faculties through the strict attention which must often be given simultaneously to numerous details, while it enlarges the understanding and purifies the taste by bringing the mind of the student into touch with the noblest and best thoughts of men of genius.

Recitation in Elementary Schools.—Many people, though ready to allow that a certain amount of elocutionary power is useful to people in general, yet question the expediency of teaching recitation to the children of primary schools. But these persons are mistaken. It would truly be a manifest absurdity to attempt to give little boys and girls systematic training in declamation and oratory. Yet our children would sustain a distinct loss if they were deprived of such elementary instruction in elocution as they are capable of receiving.

This Subject often treated Superficially.—What are the results of elocution as ordinarily taught in our schools? Far from satisfactory, it must be acknowledged. The total lack of sympathy with their subject evinced by many of the children, together with their droning accents, and complete ignorance of the principles of emphasis and modulation, combine too often to make the hearing of the "recitation" a veritable penance for H.M. Inspectors. Doubtless there are exceptions; and the listener is, at times, surprised and charmed by the spirit with which some poem is rendered by the pupils of a well-taught school; but the ordinary effect is so bad that it points plainly to serious defects in the mode of teaching.

The Plan usually Pursued.—What is the method commonly followed in preparing the class-recitation for Inspection day?

The first mistake made is to suppose that anyone can teach the *words*, consequently the text of the piece chosen is ground mechanically into the scholars by a junior teacher, till (by hard drill) they can almost repeat it backwards. The "recitation" is then taken in hand by someone of more experience, who adds a veneer of artificial expression by repeating the passage over and over again, and bidding the children copy exactly every variation of tone, etc. And, since in nineteen cases out of twenty, there has been little or no preparation on the part of the teacher for this elocutionary exercise, the result can only be an inferior imitation of what was, to start with, extremely unsatisfactory.

This imitative process being accomplished, the instruction ends—where it should have begun—by some explanation being given of the meaning of the passage under treatment.

A more Rational Method required.—If only a good system be adopted, there is no reason why rudimentary elocution may not be so taught as to become a source of both pleasure and profit to the children; and the plain directions which follow

will be found a means to this desirable end. But let not anyone open the Manual at this chapter, with the sanguine expectation of finding some ready-made system of rules adapted to all circumstances. In this department of education, more perhaps than in others, nature's guidance must be followed; and the rules of nature are never either mechanical or abstruse. Indeed, it is principles rather than rules that are wanted here, and they must be grounded on practical common sense.

When once teachers have mastered these principles, they will not find it difficult to draw up rules for their own use, which will be of more value than any which could be culled from treatises on the art of oratory.

The few directions here given, will be found useful by those called to teach *children*. For more technical and advanced instruction, our readers must be referred to some of the many standard works on rhetoric which are already published.

Recitation should be more Frequently Practised.—First, let it be observed that it would be utterly unreasonable to expect that the learning of a *single* piece of poetry yearly, however well it might be understood and recited, could lead children to appreciate the gems of literature, or improve their taste in any marked degree. No, if the teaching of this subject is to bear any permanent fruit, it must have a recognised place in the daily time-table of the school. A cultivated taste, and the power of reading with correct expression, are usually faculties of slow growth; and when, as is sometimes the case, the external circumstances of the children are anything but conducive to these acquirements, it behoves teachers to give all under their charge constant and systematic training in school.

Such Training a source of subsequent Enjoyment.—Only those who have accustomed themselves to store

the memory from early youth with beautiful passages of prose and poetry, can realise the pleasure experienced by calling them to mind in after years. It may safely be assumed that children would look back to their school-days as a far happier period, if their minds had thus been supplied with pure and beautiful ideas.

We would, therefore, recommend that at least once a fortnight a fresh piece of poetry "or other passage," should be taken in hand, and taught according to the suggestions offered in the following pages.

Choice of Suitable Pieces.—Let the subject selected be not only adapted to the capacity of the children, but also likely to interest them. Those to whom the choice is entrusted, must remember that the learners range in age from seven to thirteen, *not* from thirteen to twenty. The extreme difficulty and *dryness* (from a child's point of view) of many pieces chosen, are responsible for a large proportion of the "defective recitation" complained of. It is true that the ultimate decision rests with the Inspector; but teachers have it in their power to seek out and *suggest* what is simple and suitable.

Three Points must have Attention.—It may be of use here to point out that the poetry chosen for recitation should—(1) be written in a metre that will be easy and natural to children; (2) should treat of such subjects as they can understand; and (3) express feelings that they can enter into and sympathise with.

Metre.—With regard to metre, it may be remarked that blank verse, and rhymed verse with long lines, are unsuited to younger pupils. In the lower standards those metres should be selected which flow easily. Poetry so written is very easily learnt and remembered, and forms a good foundation for something more difficult, later on.

Such examples will not necessarily be always found among

the writings of what are called the *standard* authors. Indeed, so long as the principal piece of the year—the one to be recited on the day of inspection—is by a writer of world-wide celebrity, it will often be found best to select the remainder of the poetry from other sources. Many pieces of great excellence—for children at least—have been written by authors of whom little is known.

At first, passages of an allegorical, dramatic, impassioned, declamatory, or satirical character should be avoided. If they are introduced at all, it must be when the scholars are old enough to be capable of appreciating them. Neither should the poetry for the early standards contain metaphorical allusions, unless they be such as admit of easy explanation.

Only Certain Sentiments can be Comprehended by Children.—Subjoined is a list of those feelings which are easily understood by the young, and which, consequently, can be more or less correctly expressed by them :—

Cheerfulness, joy, delight, wonder, shame, revenge, boasting, fear, pride, sorrow, hope, courage, respect, affection, anger, fatigue, peevishness, idleness, liveliness, industry.

The Teacher's Preparation.

A Perfect Acquaintance with the Passage is Needful.—Unless the lines selected are already familiar, let the teacher study them carefully, in private, before bringing them to the notice of the class. How can children be expected to recite with intelligence, if their teachers are ignorant of the aim and meaning of the poem in question? Perchance they have never read it through in their lives, yet they rashly proceed to instruct others in the fittest way of rendering its meaning.

All who profess to teach even the merest elements of elocution should lay the following maxim well to heart. *The*

correct recitation of a passage depends upon the speaker's ability to grasp the meaning of the author and to sympathise with his sentiments. Now, by diligent study alone, can we discern the intention of an author in writing a particular passage.

Sometimes Helpful to make an Analysis.—The full sense of a passage would sometimes be more easily elucidated, if the teacher analyzed it by supplying answers to such questions as the following :—

(*a*) What is the dominant idea contained in these lines?

(*b*) Which are the subordinate ideas, and what relation do they bear to the leading sentiment?

(*c*) Can I form any notion of the author's frame of mind when he composed this?

(*d*) What circumstances may be supposed to have led him (1) to write it, and (2) to express himself in this particular manner?

By this means the earnest teacher may succeed not only in arriving at an intelligent understanding of the passage, but in arousing in her own mind a certain *sympathy* with the feelings and motives of the writer. And this will be found an effectual aid towards putting the subject clearly and forcibly before the class. Very beneficial is it for teachers to recite diligently in private what they will have to teach in public—not attempting to instruct others until they are satisfied that they can give a fair reproduction of the writer's ideas—with the correct articulation, pauses, and emphasis.

To each word, clause, and sentence, let the full value be assigned—not only as considered separately, but as taken in connection with the rest.

Teaching the Recitation.

Having made conscientious preparation, let the passage be introduced to the class. The following directions may be of service to the inexperienced :—

(*a*) Begin by talking to the class about the poem, telling them, informally, what it is about, and why it was written. Whatever the subject may be, try to give them some information respecting it—making all as interesting and life-like as you are able. To this end, make full use of any illustrations you can procure.

(*b*) Read it aloud more than once, with taste and feeling.

(*c*) Go through it with reference to the grammatical construction, breaking up into the proper divisions, and paraphrasing when necessary.

(*d*) Next, explain the meaning of every difficult word and phrase, directing attention to any metaphor or allegorical expression. Repeat this, till the subject-matter is thoroughly understood.

(*e*) Afterwards, read the lines through for the purpose of pointing out where the emphasis and pauses ought to come, *and why*. Try, all through the lesson, to inspire the children with your own appreciation of the passage.

(*f*) Then, and not before, let the pupils read the recitation. They must do this aloud (and often) until you feel they can be trusted to study it alone. The younger children may also be desired to make a fair copy of the words, and older pupils to write out a prose analysis of the same.

In the last place, acquaint the class with any interesting facts you know respecting the author, the names of his other works, etc.

Before beginning a class-lesson upon any particular passage, it is well to have the lines written out on wide blind-holland, with the stops and rhetorical pauses marked; this, when placed before the children, is a great help to them.

Mere Imitation to be Avoided.—Throughout the instruction, pains must be taken to avoid producing *artificial* expression—mere mimicry. Children can perform surprising feats in the way of repeating correctly what conveys no idea to them. They can also be so trained as to appear to feel deeply the pathos of some poem, when they have not the smallest real appreciation of the subject. But such exhibitions as these only give pain to those who love the young, and would fain guard their simplicity and truthfulness.

Some Principles of Elocution.

We shall now consider briefly a few principles of elocution which ought to be thoroughly understood, even though they may not appear to have any direct bearing upon recitation as commonly taught in Elementary Schools.

Management of the Breath.—The air we breathe is the material out of which our words are created, and children should be taught the approved method of controlling the respiration when reading or reciting. They should be instructed to inflate the chest before commencing, and then to keep it well filled so long as they continue to speak—to let their words *float out* (so to say) upon the air they exhale.

The observant teacher will notice that some children have a habit of beginning to read or speak with the chest empty and contracted. They then catch at their breath, sometimes perceptibly; and, in so doing, suck in the first few words, which, consequently, are all but inaudible. Others in the class drop the voice at every comma—if not oftener—owing to their not having been trained to keep up a good supply of air in the lungs. They take breath too infrequently, and often in the wrong place.

The amount of air which suffices to preserve life, is not enough to support the voice during sustained speech. Accordingly, deeper inspirations must be taken, and all opportunities of adding to the supply in the lungs made the most of. Even the briefest possible pause may be utilised for the purpose. The operation should be imperceptible; for to see a person almost gasping for breath has anything but a pleasing effect.

Practice.—Most writers on elocution recommend that learners should have regular drill in both holding and taking breath, and there is no doubt that such practice is of considerable utility. Not only does it impress upon children that the manner in which they breathe signifies—a fact which will

be quite new to many of them—but it helps them to give full value to certain vowel and consonant sounds, which they are apt to slur over in ordinary conversation. It is only by much patient practice that some children can be habituated to pronounce the vowel sounds aright.

Here are a few breathing exercises:—

(*a*) Begin by practising the scholars in the vowel-sounds—*a, ah, aw, e, i, o, oi, ow, u, oo.* Let them sustain each in turn to the full extent of their breathing-power, swelling out the note in the middle, and then letting it die gently away. Next, let every sound be given several times in succession—the pupil taking a quick unapparent breath between

(*b*) Another good exercise is to cause the children to say the ordinary *tables* deliberately and distinctly. First, with as little taking of breath as may be—the deep inspiration they commence with being made to hold out to its full length. Again, let them repeat the tables, and *replenish* the breath between each separate clause.

(*c*) At another time, the pupils may be required to count slowly up to 100, taking breath only at regular intervals indicated by the teacher—these intervals being gradually lengthened. Or, counting may be practised with a gentle expansion of the lungs before each number.

(*d*) The months of the year may be repeated in the same way, or any other sequence of words that seems appropriate.

(*e*) The letters of the alphabet, or their sounds, may be given—the breath being held. Sometimes these may be said in a loud, strong voice; at others in a whisper; now upon a high note, again upon a low one; and so forth.

Most young people would be benefited by being occasionally subjected to a little of such breathing-drill, by way of prelude to an ordinary reading-lesson, no less than when they are having practice in recitation.

Nor need we fear that this exercise will be prejudicial to the health of our scholars. Using the various muscles of the body, we all know, conduces greatly to physical vigour; and those of the respiratory organs offer no exception to the general rule.

Should, however, the lungs be at all diseased, the chest

and throat delicate, or the children starved and under-sized, breathing-drill must be used with care and caution.

Articulation.

Articulation means the correct pronunciation of words and syllables. Children, when untrained, have commonly a very faulty way of speaking. They run the words into each other, leave out whole syllables, and clip off the terminations. In addition to these defects, many children habitually mispronounce certain words. Constant practice will alone eradicate these faults.

Importance of Clear Articulation.—To articulate clearly and distinctly is of primary importance to good speaking or reading. A person with a weak voice but clear utterance is heard better, and at greater distance, than one with a powerful voice but defective articulation. The faults to be chiefly guarded against under this head, are mumbling, hurried utterance, clipping and jerking out the words, or—on the other hand—trailing and drawling them. The vowels are the most important part of words, and if due prominence is given to these, the consonants will generally take care of themselves.

The teacher should contrive that the children at least *begin* well, by insisting upon the first words being said very distinctly—albeit in a quiet tone of voice. Above all, pains must be taken to make them recite slowly. Some writers on elocution go so far as to assert that "Rapid utterance lies at the root of every fault that can be committed in recitation." Each word should emerge from the lips clear and full, like the sound of a bell that is made of the best metal. To produce this desirable effect, the final consonant in each word must be distinctly sounded. Unless this is attended to, an entirely wrong meaning may be given, as will be perceived by the

following examples. "Who ever imagined such *an ocean* to exist?—Who ever imagined such *a notion* to exist?" "That *lasts till* night.—That *last, still* night." "The *cry* moved him.—The *crime* moved him."

Modulation.

Much of the beauty of elocution depends upon the way the voice is modulated. This modulation should always be in strict accordance with the subject, and mark the transition from one kind of emotion to another. To even a superficial observer, it must be clear that certain subjects require a loud tone, others a soft one; to some a quick, to others a slow measure is appropriate; now the voice should be pitched high, then low. To secure this variety of expression, attention must be paid to (1) pitch, (2) force, (3) time, and (4) inflection. All these come under the head of *modulation*, and we will give a few hints about each:—

Pitch of Voice.—*Pitch* means the key—whether high or the reverse—in which a person speaks. But it must not be forgotten that, in these pages, we are treating of elocution for children. Now, the voice of a child is immature, and rarely possesses much compass. Consequently, most of the advice given by professors of the art, must be accepted with limitations, when very youthful reciters are in question.

How Pitch of Voice is Regulated.—Whether the reciter is to speak in a high or low key, will depend entirely upon the *sense*. Prose or poetry that is expressive of joy, triumph, or command, requires a high key; sadness or awe a low-pitched voice. Naturally, the medium pitch is most frequently called for. Unless there is obvious reason to the contrary, children should be instructed to *begin* in a key pitched moderately high. A little practice in changing from high to low, and *vice versa*, gives elasticity to the voice.

Force.—This determines whether the voice shall be strong and full, or subdued. A man with a full-toned voice can give considerable effect to a passage by varying the force with which he speaks; and even with children a pleasing variety may be introduced by paying attention to this part of modulation. The mistake must not be made that force means noise. True force gives the idea of moral power, and is characterised by dignity and stateliness of tone, rather than by increase in the volume of sound.

Another error, common among children, is that of substituting pitch for force. They elevate the voice to a higher key, when they ought to deepen the sound. This defect is particularly natural to girls, and (it may be added) to women. Who has not heard housewives of the uneducated class, when their feelings were roused, ascend the scale gradually till the voice reached a scream?

The rules laid down for the modulation of the voice, follow the principle that all elocution is based on true conversation, and consequently that elocutionary rules are much the same as those which govern ordinary speech. This shows us that the voice, when reciting, should be strong and deep, or soft and gentle, much as is the cultivated voice in conversation.

Time.—*Time* has regard to the quickness or slowness with which words are uttered. This is indispensable to good recitation, and a disregard of its principles is the cause of much of that monotony in public speaking which has such an unpleasant effect. What can be thought of the taste or sense of a person, who preserves precisely the same pace whether speaking of a banquet or a funeral? But far worse is the very ordinary fault of adopting a sort of rhythmic measure—allotting to each syllable precisely the same time as the others—quite regardless of the meaning, which is completely sacrificed to a dreary, half-singing intonation. This sing-song, as it is called, is the bane of school-room recitation, and can only be banished by first-rate instruction and training.

It is fatal to all true expression to make the sense give way to the time, instead of regulating the time strictly by the sense.

When care is taken to speak at a suitable rate—now fast, now slow, as the occasion seems to warrant—it gives the impression that the speaker is calm and self-possessed. On the contrary, a hurried, monotonous utterance betrays nervousness or excitement. Children, as a rule, are given to hurrying the time as soon as they have learnt the words, and great watchfulness is needed to check this tendency. The most skilful teaching of a passage will be thrown away, if the pupils are allowed to rush through it at full speed. It is allowable to speak rather quickly when the words denote rapid motion, change, animation or cheerfulness; but when grief, despair, misfortune, or death are spoken of, the time should be solemn and slow.

We may remark here, that, while it is not to be expected that children can mark the various shades of feeling in a poem, to the same extent as grown people, yet they *can* be trained more or less to vary the pitch of their voice and the rate at which they speak. And by this means an amount of taste and expression may be imparted to their recitation, which is very pleasing. Nor is it so difficult as some might suppose to teach children to modify the tone and quickness of their words *in accordance with the sentiment or emotion that has to be expressed.*

Inflection.—We come next to "Inflection," which is more difficult, and, indeed, hardly falls within the scope of what children can accomplish. However, any hints and allusions under this head, which appear too complicated for such young learners, may be found of use in training pupil-teachers and other students.

There are numerous lights and shades of meaning which cannot be accurately rendered, except by the help of "Inflection." Accordingly, it is sometimes called—"The elocutionist's crowning power of expression."

Inflection is the change of the voice upon a word. It is sometimes called *the slide*, because the voice (as it were) slides either to a higher key or a lower one. We are probably very little aware of the part which inflection bears in every conversation we hold. The voice changes each moment in an upward or downward direction, and an amount of variety is thus introduced into its modulations which we are, for the most part, unconscious of. This becomes very apparent in listening to a deaf-mute who has been taught to speak by the modern system. He has learnt to articulate, but as it is impossible for him to be taught the inflections of which the human voice is capable, he jerks out each word exactly in the same monotonous tone. The effect of this is often to give the impression of a strong foreign accent.

The Natural Inflection should be used in Recitation.—The inflections we use, or ought to use, in reading or reciting, are regulated by the same principles as those which, unperceived, affect the voice in ordinary converse; but they are more emphatic and may be more exactly defined. How can we determine whether it is correct for the voice to rise or fall upon a given word? Beginners cannot do better than notice the inflections which the voice naturally takes in common conversation. By closely observing these, they will learn much —perhaps ample for their purpose. Let them repeat aloud some simple sentence, such as—"Have you been out this morning?"—and remark how the tone changes on each word. This will be the more evident if they first say the same sentence in monotone.

Simple Rules for Inflection.—It may be useful for the teacher of elocution to keep in mind a few of the simplest laws which govern inflection—always remembering that our conception of the author's sentiments must be our main guide here, as elsewhere

The Falling Inflection is used for *completeness of statement*, for anything that is asserted, or laid down as *final;* also for what is commanded, and for all questions which cannot be answered by "yes" or "no."

The rising inflection, on the contrary, indicates *incompleteness of statement*, and expectancy of something further to follow.

Questions that can be answered by "yes" and "no," and the language of request, surprise, supplication, or appeal, require the rising inflection.

The end of a sentence to which a full stop is attached, takes the falling inflection, *e.g.*, "William has returned from Paris." "The drawing master has given a lesson to-day." At the end of a question, it is right to stop as long as at a period, and to use generally the rising inflection, as if *waiting* for an answer to complete the sentence. In double questions, coupled by "*or*," the first part requires the rising, the second the falling inflection, *e.g.*, "Did you see the Queen or the Princess?" "Is he selfish or generous?"

When a sentence is meant to express wonder, admiration, or strong feeling of any sort, it is usual to drop the voice, *e.g.*, "What a glorious sunset!" "How wonderful are the ways of Providence!"

In reading poetry, the voice must be sustained—often through several lines—so long as it appears that there is something to follow before the meaning can be made plain. At a full stop, or colon, the voice invariably falls, but it is sustained at a comma. Whether it is to rise or fall at a semi-colon, can only be decided by the sense.

Circumflex Inflection.—When the voice changes twice on the same word, the inflection is called compound, or circumflex. Writers on elocution recommend elaborate exercises on the circumflex or compound slide. But such practice is not suited for children, and the hints given above will be found sufficient for all ordinary purposes.

Emphasis.

The Value of Emphasis. — It is generally admitted that the most important part of elocution consists in the emphasis, or stress, laid upon certain words. Why is this? Because when the importance of certain words above others is duly marked, it is the surest proof that the meaning of the author is grasped by the reader, and it likewise enables the latter to make that meaning clear to his auditors. This is the true function of emphasis, and how totally does it condemn the too common habit of teaching it artificially!

Children Can Understand the Principles of Emphasis. — The reason why certain words are more emphatic than others, can often be made clear to children. The teacher should explain that—just as each word of more than one syllable has a specially accented syllable—so every sentence has a main idea, and we are able to give prominence to this idea by laying a particular stress upon one or more words.

The leading idea in any sentence is almost always the new idea. Any word, then, which introduces something not referred to previously, must receive the emphasis. For instance, in Longfellow's "Excelsior" the principal emphasis in the sentences—"'Try not the pass,' the old man said." "'Oh stay,' the maiden said, 'and rest.'" "A traveller, by the faithful hound," — would be upon "pass," "old man," "maiden," and "faithful hound," because they usher in new thoughts—something not before alluded to in the poem.

The stress is not always upon the Subject and Predicate.—Supposing each clause of a sentence were to be taken singly, and considered on its own merits, the stress would be invariably upon the subject and predicate. But clauses must usually be dealt with in connection with the rest of the passage; and so it not unfrequently happens that the meaning will be best brought out, by giving prominence to what is, in itself, a subordinate word.

The grammatical value of the different parts of speech is unquestionably of some service in determining their importance in the sentence; therefore, when in doubt, we should always place the emphasis on both the noun and the verb; or, failing these, on words which help to describe them, like the adjective and adverb. But careful study of a passage will generally render it unnecessary to resort to so mechanical a process.

In emphasis, the effect is much heightened and additional force given, by making a slight pause before and after an important word, or changing the voice to a higher or lower key.

Exclamations and interjections of all kinds need, for the most part, to be strongly marked. When striking words are reiterated, each must be more fully sounded than the preceding one, as "Help! HELP! HELP!" "Never! NEVER! NEVER!"

Antithesis.—The contrasting of one word with another has a direct effect upon emphasis. In contrasted terms, it is the second which must be made prominent, and this frequently results in the stress falling upon an apparently insignificant word. Now and then it falls on the prefix of a word only. Adverbs and prefixes expressing negation are often strongly marked.

At the same time that the pupil is recommended to pay great attention to emphasis, it must be remembered that when this is overdone or wrongly placed, it is a grievous violation of good taste.

One of the commonest and most serious errors is that of creating what is called *a false antithesis;* and there is always risk of this, unless the true signification of a passage is diligently studied, and understood.

The following examples of false antithesis will explain what is meant:—

"I venerate the *man* whose heart is warm." This would suggest the false antithesis—I do not venerate the *woman* whose heart is warm.

"I met a little village *girl*"—would suggest the idea—not a *boy*.

"Dust thou art to dust returnest," was not *spoken* of the soul—but might possibly have been *written*.

A striking instance of false antithesis is afforded by many clergymen who repeat a clause of the creed thus—"The third day He rose *again* from the dead,"—as though there had been a previous resurrection.

A diligent and intelligent teacher need seldom be in doubt as to which portion of a passage should be marked. Often, indeed, it is self-evident that the entire meaning turns on a single word. Or again, it becomes plain that a sentence may be wholly misunderstood, unless two, three, or more words are made to stand out in relief; then, just as a painter makes his background subordinate to the subject of his picture, so must the reader cause the rest of the sentence to subserve the dominant idea.

The rule that no word should be made prominent which could be spared from a sentence without weakening the sense, is a good one to keep in mind.

Care must be taken not to make the recitation jerky, by placing the stress only upon very few words. Indeed, unless there appears good reason to the contrary, it is wiser to place a moderate emphasis on all the principal words—keeping the articles, prepositions, etc., completely subordinate—than to mark merely a particular noun or verb here and there.

We all use considerable Emphasis.—Probably few people have observed how strongly in ordinary speech they mark some words of every sentence. This is more particularly true of children, and of those who, like children, are devoid of self-consciousness. "May I go out to play?" "I have such a difficult lesson to learn." "We had only dry bread for breakfast," says the child, and not a shade of doubt can exist in the minds of his hearers as to the leading idea he desires to convey. And, similarly, the man who is eager about his subject, and who has a clear conviction of his purpose, is certain to speak forcibly and impressively. So also, those who grasp the full aim and beauty of what they read, can readily decide which

words shall, and which shall not be marked with peculiar emphasis.

Pause.

In good reading or reciting, there are two distinct kinds of pauses. First, there are the grammatical pauses, which are marked by points or stops. Secondly, there are shorter pauses—occupying such a brief moment of time as might be shewn by a half-comma or quarter-comma. These shorter intervals are never indicated by authors, because they are not required by the grammatical structure of the sentence, but only for its more effective delivery.

The slight break after a word is called a "Rhetorical" pause. The length of these breaks depends on the importance of the words which precede and follow them, and also upon ellipsis. The following sentences require no grammatical stop except the period at the end, and ordinary readers would very probably read them at equal speed throughout. Yet rhetorical pauses at the words marked, would produce a much more pleasing effect:—

The value of rhymed verse' depends entirely upon the thought' or thoughts' enshrined within it.

The golden head' that was wont to rise at that part of the table' was now missing.

Such men must' one day' become the arbiters of the weal' or woe' of nations.

A common error is to imagine that the ordinary punctuation marks are sufficient to indicate the stops which should occur in reading. This is not their object; they are inserted for the purpose of making the construction of the sentence clear. True, they generally point out where certain pauses should come; but these are not nearly as many as the laws of good reading demand.

How these Pauses are Regulated.—In the grouping of the words of a sentence according to their grammatical

sequence, will be found the best guide towards pausing in the proper place. Here, the correct rule is,—that the words belonging to a clause should be united, but the clauses themselves should be slightly separated.

The principles that govern the grouping of words, would form an interesting study for pupils old enough to take it up. There is not space in this volume to enter fully into the subject. We must accordingly content ourselves with pointing out, that a series of well-graduated exercises upon those parts of speech which may be combined for elocutionary practice, are very improving to elder scholars and pupil teachers. Exercises of the kind we describe, are to be met with in some of the best manuals on elocution.

Comparative Length of the Pause.—There is room for considerable skill in the management of the pause; not only must it be made in the right place, but it should be of suitable length. A striking effect is produced when it occurs unexpectedly—a sudden break being made which calls the hearer's attention to something altogether out of the ordinary, such as deep and solemn emotions, or mournful incidents. "The sentence was—Death." "There is one sure refuge for the oppressed—The Grave," are examples of this kind of pause. It is obvious that it should be rarely used, or it will miss its effect.

The following hints for *pauses* may be of use:

A slight pause should be made—

(*a*) Before and after any word which it is desired to emphasize.
(*b*) Before and after a parenthesis.
(*c*) Between a question and its answer.
(*d*) After an inverted sentence or part of a sentence.
(*e*) After a copulative conjunction, if it is separated from the second word it connects.
(*f*) Very frequently after the words—but, then, nor, however, accordingly.
(*g*) Before and after a phrase intervening between a nominative and its verb.
(*h*) Before an adjective when it *follows* the noun.
(*i*) Wherever there are ellipses, or omissions of words.

These brief hints on elocution—as applying to Elementary Schools—may fitly end with a few directions with regard to the position which the class should take up when reciting.

The proper use of the voice requires an upright posture, though without rigidity. Let the back be kept straight, the shoulders pressed backwards and downwards, the chest well raised and expanded. The head should be held easily erect, and the arms by the sides, except when they are raised in appropriate gesture. The heels should be kept near each other, and the toes turned outwards; the right foot may be planted a little in advance of the left.

The chest, as already observed, must be kept well supplied with air. Let the pupils be taught to inhale deeply and gently, and to exhale slowly. If the mouth be kept well opened, the throat will open correspondingly, and roundness and fulness will be given to the sounds that proceed from it.

The question of gesture has not been touched upon. It forms a distinct branch of oratory, and one which is obviously unsuited to children. Nevertheless, it is allowable to introduce a little action, whenever it would be natural to the youthful reciters to use it were they conversing; also when it may be of help in bringing out the full meaning of a passage.

CHAPTER XVI.

Parting Counsels.

ALL that has been advanced in these pages has been with the one object of adding to the happiness and well-being—physical, intellectual, and moral—of the children of this nation. Much more might have been said; but the space at command is exhausted, and we can but add, in this concluding chapter, a few words of personal advice to the teacher.*

Loftiness of the Vocation. — Viewed aright, there is no calling more excellent than that of a teacher—no occupation more delightful. Taking into consideration the value of the material to be worked upon and its susceptibility of improvement, there is absolutely no field of labour which is more productive, or which affords richer opportunities for devoting ourselves to the good of our fellow men.

Teachers may indeed be said to stand upon holy ground. Emissaries of the Most High, their mission is to make known His sovereign Will to the creatures of His hand, and to bring the light of Divine Truth to shine upon their ignorance. They ought to be the leaders, the inspirers of mankind. They should set it before themselves, as the supreme object of their life-toil, to change the face of society—

* It will be noticed that geography, history, and grammar have not been touched upon. Let not, however, our readers conclude, from this, that we deem them unimportant. On the contrary, any educational scheme which did not embrace (at least) the two first-named subjects, would be incomplete and quite unsatisfactory. But they are already ably treated in numerous hand-books, and it appeared better in this manual to direct attention rather to composition, elocution, and conversational lessons, about which very little has hitherto been written that could be of use in elementary teaching. Grammar, as taught in primary schools, has not proved of much practical value. This failure is due to the superficial method pursued in the lower standards. Accordingly, the Society will shortly publish a little work entitled, "First Steps in Grammar."

by rearing generations of men and women animated by noble aims, and bent upon doing their utmost to uphold truth and righteousness, and to crush out and banish all meanness, selfishness, and cruelty from God's earth.

Responsibility of their Calling.—Teachers cannot be too much impressed by the importance and solemnity of their work. Upon them devolves the onerous duty of preparing the bulk of the rising generation—not only to fight the battle of life, but to fulfil a glorious and immortal destiny in the great Hereafter. There should be no self-deception in the matter; they ought to feel that the motives with which they enter the profession are acceptable in the sight of God; and especially must it be remembered that they instruct even more by their example, than by the principles they inculcate.

Coldness and carelessness in giving lessons, laxity of speech and conduct, indifference to the children's welfare and comfort, indulgence in irritability of temper or levity of manner, cannot fail to make indelible and disastrous impressions on the young. To ignore their power for good or evil, to treat it lightly, to banish the thought of it from the mind, will not release instructors from the responsibility incurred by the mere fact of having made teaching their life-work. If evil and not good is wrought through their instrumentality, they cannot be held guiltless. Alas! of many who enter upon the sacred duties of a teacher, may it not possibly be written—"Better had it been for them if they had never been born," for have they not scandalised the little ones of the flock, and hindered both their spiritual and mental growth?

High Principle Indispensable.—Is it not obvious that only those whose purposes are high and pure should undertake to lead and guide others? Let all, then, strive to realize that while it is easy, with average abilities, to become a mere school *keeper*, to be an *educator* demands virtues and gifts of the highest order.

Therefore, we would say to every teacher: Seek after justice, mercy, love, patient energy, and self-devotion; strive by prayer and effort to make these qualities your own; or else give yourself to some calling where low principle will work *less evil*.

General Precepts.

Love your Pupils.—Those who are influenced by true affection for the children under their charge, unconsciously encourage the growth of the higher and better nature within them, while others who yield to apathy and harshness invariably call into activity the latent evil which lurks in every human breast. It is impossible that you should efficiently train others, unless your heart is in all you do. It may be asked—Is not this fervour needed in all professions? Yes; but it is peculiarly required by teachers. Those who are brought into daily contact with numbers of fresh young minds, should carry their heart in their eyes, in their voice, in all they do or say. Their pupils know without being told, whether they delight in their office, and love to be with them. It is a sorrowful fact that there are teachers who take every opportunity of announcing that they cordially detest both children and the teaching profession. We pity the unfortunate young people committed to the care of these sham-instructors. Perhaps we pity still more the shams themselves. Their every conception of life and its solemn duties and reponsibilities, must be wrong from the foundation.

The Dull and Troublesome Children. — There is no surer test of unselfish love in teachers, than their demeanour towards the stupid and backward—or the turbulent—members of their flock. The naughty, troublesome child—the "bad boy" who is to be found in every school, can in most cases be saved from himself. He has a conscience and a will which may be roused to that which is

good—for surely the Divine spark in his soul has not been utterly quenched. To find that spark and nurse it into life, is work which is very nearly *divine*. But all depends upon whether you, dear teacher, *love* that boy—whether he is to you the *one* gone astray. If you have even a little love for him, fan it to a flame, and in its warmth your whole school will rise into fresher, more vigorous life.

Then, with regard to the stupid, slow children, it is helpful to keep in mind that—while it does not require a very skilful instructor to be of service to the clever pupil—it *does* need one who is highly gifted to train the dullard. The lower and feebler the mind that has to be influenced, the higher and more powerful is the talent needed to raise that mind. Besides, is not the true leader ever the prop and helper of the weak?

It is no uncommon thing to hear a teacher complain that her pupils are of a low, ignorant type. Well, it may be that their surroundings are unpromising, and perhaps it is for this very reason that Divine Providence has sent them a bright intelligent teacher! Possibly, too, they may be ignorant; but why are they at school, if not to have this ignorance dispelled? To lose patience with the backward scholars, to stigmatise them as dunces and simpletons, to reproach them because they are unable to keep on a level with clever, sharp pupils, is to prove that the teacher is more dull and stupid than the poor witless children themselves.

A Real Evil.—There is a more formidable evil than ignorance, though it is one which, perhaps, the average teacher is less quick to discern. This is *contentment* with ignorance—the heavy dulness that has no *wish* to learn. Here is a foe which all teachers are imperatively called upon to combat and overcome. They have to reach the minds of the apathetic children — to get at their inner life, and rouse in them a healthy intelligence. If we all had a vivid faith in the *creative* power of education, we should need no other stimulus

to engage vigorously in the good work. But where is the teacher that realizes this marvellous power?

"Few are aware," writes Mr. Thring, "of the stupendous fact, that skilful training as much produces new growth, and new kinds of growth in men's mental organism, as good gardening produces new growths and new varieties of plants. Additions can be made to a human being, which are quite as real as would be the bestowal upon him of extra limbs and senses. Experience testifies daily to the unexpected powers that exist in men, and which must be called out by education before they are known to exist!"

Study the Welfare of the Whole School.—Try to form an ideal of what a child's attainments ought to be after a school-life of at least six or seven years, and work steadily up to that ideal. Put spirit, life, and conscience into your work. So far as is practicable let each child feel that he is somewhat to you. Labour so to develop the abilities bestowed by God upon your scholars, that *each one of them* may grow in wisdom week by week and month by month. Teachers who do *the most good with the most pupils* are those who best fulfil their important duties.

Study your Children's Preferences. — Respect youthful impulses and inclinations, so long as they are innocent and beautiful. Next to the love of God, their home, and their country, foster that love of nature which is inherent in all young people. Help them to satisfy their legitimate curiosity about birds and beasts and plants, and all the wonderful natural objects which lie around them. Make your instruction pleasant. Does it not stand to reason that the only sensible mode of teaching is to adapt the subject taught to the mind that has to grasp it? If a subject is not presented to the scholar in an *attractive* form, some artificial and objectionable way of securing his attention has to be substituted; usually severe measures are resorted to. A

member of a large school board recently gave it as his opinion that—"Children need to be *helped* and *stimulated* to attend, by the use of the cane." We fear there are not a few teachers who incline to the same opinion, though they might shrink from expressing it with such blunt plainness. But would not an hour's quiet reflection convince anyone that to "help" children (save the mark!) to attend, by means of bodily pain, must end in rendering all learning an object of aversion and disgust?

Strive to Improve your System.—Of what extreme consequence is it that all instructors should labour ceaselessly to improve their methods! However sincerely you may wish to help and raise your pupils—yet irrational, unscientific teaching will stand like a wall of rock between you and those you desire to aid. Beware of prejudice, and cling not to the old, when you are convinced that the new is better. Do not continue to follow the beaten track because it is the traditionary—the customary one, if you have reason to suspect that it is not the straightest road to the production of this or that result; but have courage to adopt the more excellent system. Shake yourself free, once for all, from the fallacy that the acquisition of a certain amount of knowledge—a certain degree of skill—is the end of education; but realize its far nobler aim, viz., the formation of character.

Avoid Severity.—The intellect of a scholar is often subjected to a terrible strain by the forcing upon it of subjects beyond its grasp; it is cruelty to add to this strain by severity. The child is often censured when it is doing its poor little best; and to goad it on may cause a serious breakdown in health, and possibly result in untimely death. Elementary teachers cannot *altogether* remedy over-pressure. For instance, they have not (as we remarked in a preceding chapter) the appointment of the unsuitable

arithmetic which is answerable for many an aching head among the girls of our town schools. But they have it in their power to lighten such burdens by kind encouragement, and by the adoption of new and better methods. They should recoil with horror from the idea of threatening or punishing a child for mental incapacity; or because it cannot, at the word of command, concentrate attention on matters which possess for it neither meaning nor interest.

True Discipline. — While your discipline is of the firmest, let it be directed rather to the *training* than the *crushing* of the child's will. Lead him to do right from high principle, not from dread of your authority. If you can succeed in influencing even one boy to act uprightly because he loves what is high and noble, that boy may be of incalculable value to his country in after years.

Again, cultivate good habits in your charges. This is a science in itself. Wrong tendencies are, we know, born with children; but these may be, to a great degree, counteracted by the diligent formation of the opposite good habits. Those who have the well-being of their charges at heart become wonderfully quick-sighted at detecting the particular defect or weakness in each one of them, and are prompt in applying a remedy.

Two Grave Defects in Elementary Teaching.— No teacher should ignore the fact that English primary education, amid some excellencies, has not a few grave deficiencies. The most glaring of these are—(1) The deplorable narrowness of the curriculum; (2) The well-nigh total failure to bestow a love of knowledge for its own sake, and so to promote habits of independent study.

The first-named defect has already been dealt with in the chapter on "Class Talks." The evil of the second may be considerably neutralised by teachers insisting that each child shall do as much as possible himself. So long as they

persist in doing all, or nearly all, for their pupils, so long will they rob them of occasions to think—to discover—to do; and, consequently, will succed in rearing only *mental weaklings*.

If, on the contrary, assistance is invariably withheld when not needed, and the scholar inspirited to take as large a share in the lesson as possible, he will be brought up to be no helpless, dependent creature, always looking to others to prop him up through life; but a sturdy worker, who will leave the world better than he found it, and incite others to tread in his footsteps.

The true educator aims at increasing the pupil's store of power—not by merely helping him to scramble over the present difficulty—but by making of one difficulty a stepping-stone to the conquest of the next.

Make Provision for Private Study.—It is indispensable to mental progress that a scholar be led, as he grows older, to learn alone. The elder pupils, at an ate, might be required to work up certain lessons before-hand, and a carefully-arranged system of private study should be assigned them. For, surely it is self-apparent that, unless a boy who leaves school at thirteen has previously gained some idea of the value of knowledge and of the art of self-instruction, he must soon forget all he has acquired, and sink lower and lower as an intellectual being.

The proper spirit to cultivate in our scholars is that of self-help; we must get them to learn voluntarily by creating in them a hunger for knowledge. Far more expedient is it that a lad should end his school-days with settled habits of thinking, with alertness of mind, and some power of applying himself to reading and study, than with a head crammed full of actual information—*e.g.*, an extensive knowledge of dates, ability to work double equations or to draw neat maps of all the countries on the face of the globe.

The Practical Help of the Teacher Essential.—While insisting upon the need of independent work, we do not

mean that the teacher's assistance is to be dispensed with. On the contrary, our children have urgent need of being taught—guided how to do their work. They must be shewn how to master a subject with the greatest economy of force—not left to pick up information anyhow; for no child understands by instinct how to study to the best advantage. So, whether the pupil's private study is done at home or in school, the teacher ought to go over it first with him—noticing difficulties, directing attention to the salient points, and explaining how these may be printed on the memory in such order that they will lie ready to hand when wanted.

Within the whole range of the school course, a teacher has hardly any duty more important than this. The young student who blunders over his lessons testifies to the imperfection of his previous training. He gives no evidence of his own incompetence, but is a living illustration of the incompetence of his instructor.

Lessons Seldom Given Skilfully.—It is much to be feared that, out of the many thousands of lessons given daily in the schools of England, few can be considered really effective. Some hints, therefore, for those who feel dissatisfied with what they have already achieved in this direction may be acceptable:—

(*a*) **Prepare each Lesson.**—Spare no labour in the preparation of your instructions. Let each lesson you give be *studied* beforehand; not only the technical knowledge you hope to impart, but the general scope and plan of the lesson. Some teachers will do anything sooner than *think*, yet half-an-hour of quiet planning how to make their labours more fruitful, would often save days—aye, months, of vexation and vain regrets.

(*b*) **Make your Lessons Consecutive.**—Let there be connection in your teaching. If you have made it a subject

of careful thought, the whole course of lessons will be mapped out in your mind, and each one will pave the way for the next.

(*c*) **Calculate the Time at Disposal.**—Remember to plan out how each lesson shall begin and end, and so arrange as to leave a margin of a few minutes at the close, during which you can sum up what has been said, make the children realize what advance they have made (take care there shall always be *some* advance), and excite their interest concerning the next lesson. In short, try to leave your pupils with an agreeable impression.

(*d*) **Give Prominence to Certain Points.**—Make concise notes of those parts of your instruction which you desire should stand forth in strong relief. If your teaching is to be rich in results, you must impress on your scholars that which it chiefly imports them to know and remember.

(*e*) **Lop Off what is Superfluous.**—Consider what you have to say, and keep to the point. Lessons are often lengthened out by the addition of a vast amount of well-sounding information, which is either beyond the children's intelligence, or of no use in developing it. This should invariably be omitted.

(*f*) **Let it be your constant endeavour to make your class happy.**—Try to lead your pupils, not drive them. Manage with as little punishment as possible. Banish the cane; or, if you use it, let it be to correct grave moral delinquencies only. Never nag or rail at your pupils; never grumble about them. Do not regard it as waste of time to spend the few moments before a lesson, in saying some pleasant words—if it be only to tell the children how greatly you enjoy teaching them, or that the subject of the lesson is a favourite with yourself. As a violinist prefaces his performance by tuning his instrument, so do you prepare for your instruction by

putting your class into tune, thus securing their willing attention.

There exists a subtle sympathy between the teacher and the taught; you have but to feel genuine pleasure and interest in what is going on, and, to a remarkable degree, these pleasurable feelings will be transmitted to your pupils. Teachers, like preachers, must warm to their subject, or they will vainly seek to move others.

Bear in mind that you have to deal with children.—One of Matthew Arnold's last counsels to the teachers of primary schools included an entreaty that they would recollect that they taught the very young, and accordingly should, above all things, cultivate "Simplicity." Another educational authority observes—"The true teacher knows that education, like a building, must proceed from below to above. The youth of seventeen or more, is able to think and generalize. In him, reason and intellect ought to be asserting their supremacy, but a child of eleven or twelve understands chiefly what he sees, and is interested in what he can learn of actual things—objects, animals, persons. He can be trained to notice and observe, but has little conception of the abstract, and his powers of reflection are weak." If we consider these facts, we shall understand why it is that the "Masters and mistresses of elementary schools are bound, beyond all other teachers, to make their instruction plain, clear, and *simple*."

Education must follow the same law as nature. Everything in nature grows gently and gradually. The intellect will grow in the same manner, *if it is nourished with proper food.*

Education Unpopular with the Masses.—One part of a teacher's mission in this country is to bring the people to look with a favourable eye upon education. The average

Englishman is sceptical as to the benefit of knowledge; he regards its acquisition as irksome and profitless, and, if left to himself, would have none of it.

It is not so with other nations. German and Swiss parents are equally desirous with the teachers, that their children shall attend school regularly; they would not dream of withholding a child from instruction, and so no necessity exists for putting the law in force against defaulting fathers or mothers. Education is popular in these lands, and the same remark applies to America, Scotland, and France.

This popularity manifests itself in early life. The Scotch herd-boy cons his Latin Delectus under a hedge, at the dinner hour. Thousands of American youths carry forward their own education by the light of a tallow candle in their log cabins, after the winter day's work is done. The German "Workhouse orphan" studies English in his holidays. Learning is regarded as valuable even by the children, and a good education is universally recognised as the best equipment for youth.

How can zeal for knowledge be kindled in our countrymen?—There is but one feasible way, and that is by *improving the schools*. Englishmen would undoubtedly interest themselves in education, if they saw anything worth their interest. But feeling instinctively that—in the training their little ones receive—there is but little of practical value, they, very naturally, decline to deny themselves for its sake.

The people (like their children) need good Object Lessons. Once convince them that knowledge is worth the price we ask them to pay for it (if not in hard cash yet in what costs them dear); once let them see and feel the advantage of thorough, practical, intelligent teaching; and they will be found among its warmest advocates.

Meantime our educational authorities bewail increasing irregularity of attendance, and rail at the selfish indifference (so they term it) evinced by numbers of parents to the best

interests of their offspring. Nor are they slow to use such means to improve matters as seem to them expedient. But to believe that a love of learning for its own sake may be engendered by drastic measures, such as summoning parents to police courts and punishing them with fines and imprisonment, argues an entire ignorance of human nature. Such a policy will but increase the evil, and day by day deepen the national aversion to education.

When our schools become centres of intellectual life and happy progress, when the work is so adapted to the mental powers of the children that they engage in it with pleasure—if not with fervour, when the teachers are skilful and sympathetic, and punishments and penalties all but discarded because no longer necessary, there will be no need to *enforce* attendance. The children will throng the schools joyfully, and the parents, with few exceptions, will be willing to make sacrifices to keep them as long as possible under such benign influences.

This goal let our teachers set before themselves. What a triumph would it not be, thus to bring about the much desired revulsion in favour of knowledge by the peaceful agencies of tact and skill, labour and love!

But to effect such a revolution, what diligence, enthusiasm, and self-sacrifice are needed! That exalted conception of education which is the only true one, can never be fully grasped except by those in whom the desire to bless and benefit their fellows is an absorbing passion. This noble spirit of self-devotion is not accorded to everyone, but all have power to create in themselves some portion of it, by reflecting often on the grandeur of their vocation, by setting constantly before themselves a high ideal of their duties, and striving, with ever-increasing earnestness, to rise towards that ideal.

THE END.

Children look at those who
address them.
No interruption during class
Work no matter who enters.
A long sentence read once &
class told to write as much a
they can remember of it.
Allow children only just
time enough for their work
Motto - Perfection in all things

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